1961

WESTERN AUSTRALIA

# R E P O R T  O F  E V I D E N C E

taken by

Mr. G. J. RODGER, B.Sc.

appointed on the 27th April, 1961, as a

ROYAL COMMISSION

to inquire into and report upon bush

fires in Western Australia.

BUSH FIRES ROYAL COMMISSION

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WESTERN AUSTRALIA

1961

REPORT OF EVIDENCE

taken by

GEOFFREY JAMES RODGER, ESQ., B.Sc. (For.)

Appointed, on the 27th April, 1961, as a Royal Commissioner to inquire into and report upon bush fires in Western Australia

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COMMISSION AND TERMS OF REFERENCE AS PUBLISHED IN THE "GOVERNMENT GAZETTE" ON THE 1ST MAY, 1961

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ROYAL COMMISSION

| | |
|---|---|
| WESTERN AUSTRALIA, )<br>TO WIT, )<br>JOHN PATRICK DWYER, )<br>Lieutenant-Governor )<br>and Administrator )<br><br>(L.S.) | By His Excellency The Honourable Sir John Patrick Dwyer, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Lieutenant-Governor and Administrator in and over the State of Western Australia and its Dependencies in the Commonwealth of Australia. |

To Geoffrey James Rodger, Esquire, of 38 Lynington Street, Tusmore, in the State of South Australia, formerly Director General, Commonwealth Forestry and Timber Bureau:

I, the said Lieutenant-Governor and Administrator, acting with the advice and consent of the Executive Council do hereby appoint you Geoffrey James Rodger to be a Royal Commission to inquire into and report upon --

(1) the causes, origins and development of the bush fires (of the kind contemplated by the Bush Fires Act, 1954-1958) which commenced to burn within the said State at or near --

(a) Dwellingup, on or about the 19th day of January, 1961;

(b) Karridale, on or about the 27th day of February, 1961;

(c) Gidgegannup, on or about the 25th day of February, 1961; and

(d) Chittering, on or about the 15th day of December, 1960

(each of which fires continued to burn for some days) and also of any other bush fire or bush fires (if any) which burned in the said State at any time during the first three months of 1961 and concerning which you consider it desirable to inquire into for the purposes of this Commission;

(2) in regard to each such bush fire, the measures taken to prevent its outbreak and spread and to protect life and private and public property;

(3) the measures which are necessary or desirable to be taken by any and what persons, corporations and bodies --

(a) to prevent the outbreak of bush fires in the said State or to prevent the spreading of such fires; and

(b) to protect life and private and public property in the said State from the consequences of such fires;

(4) the basic requirements for an effective State Fire Emergency Organisation to handle major fire emergencies and to co-ordinate and ensure the taking of measures as aforesaid

and I hereby declare that by virtue of this Commission you may in the execution hereof do all such acts, matters and things and exercise all such powers as a Royal Commission or the Chairman or members of a Royal Commission may lawfully do and exercise whether under or pursuant to the Royal Commissioners' Powers Act, 1902-1956, or otherwise.

Given under my hand and the Public Seal of the said State,
at Perth, this 27th day of April, 1961.

By His Excellency's Command,

DAVID BRAND

Premier.

GOD SAVE THE QUEEN ! ! !

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TECHNICAL ADVISER TO COMMISSIONER:

Alan Grant McArthur

SECRETARY:

Joseph Richard Waldron

CONSULTANTS:

Henry James Hale

John Reginald Purse

Frank James Oates

BUSH FIRES

ROYAL COMMISSION

TUESDAY, the 9TH May, 1961

The Secretary read the Commission and terms of reference as published in the "Government Gazette" on the 1st May, 1961.

ALLEN HERBERT SUTHERLAND, Secretary,
Bush Fires Board, sworn and examined:

BY THE COMMISSIONER: You have, I understand, a prepared statement which you wish to make in the first instance?---That is so. I propose to read this fairly rapidly, unless you wish to ask me questions.

I propose to let you read it right through. I will not ask you any questions, if it can be avoided, until you have completed the whole of your evidence?---Very well. The statement is as follows :-

I, Allen Herbert Sutherland, duly appointed Secretary of the Bush Fires Board, submit the following general evidence on behalf of the board. This statement of evidence was approved at a meeting of the board held on the 1st May, 1961.

The Bush Fires Board:

The Bush Fires Board was constituted in 1955, under the provisions of the Bush Fires Act, 1954, and at present comprises the following members :-

| | | |
|---|---|---|
| Messrs. F.C. Smith | Under Secretary for Lands | - Chairman |
| J.M. Stewart | Representing the Road Board Association | |
| J. Heitman | " " " " | |
| L.W. Nenke | " " " " | |
| J.R. Purse | " " " " | |
| S.H. Knight | " " " " | |
| A.J. Milesi | " | Forest Department |
| C.R. Stewart | " | Railway Department |
| A.W. Curtis | " | Underwriters' Association |
| A.R. Barrett | " | Nominee of the Minister for Agriculture. |

The Board was similar in its membership to the Rural Fires Prevention Advisory Committee which it succeeded.

History :

To enable a full appreciation of the policies followed by the Bush Fires Board to be obtained, an outline is necessary of the evolution of fire control measures in the State.

The high temperatures and low humidity experienced over the summer months in Western Australia, together with the fact that average rainfall is very light in these months, gives rise to severe

fire dangers almost every year and no doubt caused the question of the control of bush fires to figure quite early in the history of Western Australia. Various ordinances were issued in the latter part of the 1890's, imposing some prohibitions on fires in the summer months, demonstrating an awareness of the serious fire danger, even before very extensive agricultural development had taken place. The first Bush Fires Act was passed in 1902, and came into force in the period when agricultural development was beginning to gain impetus. The major early agricultural development in the State was directed towards the growing of grain crops. Once the crop was harvested, there was very little risk of major financial loss so far as the farmer was concerned, and consequently a considerable amount of burning took place during the height of summer, so that development could be pushed ahead. The spread of pasture development and stock into areas previously devoted almost entirely to the production of grain caused a considerable extension to the period during which serious agricultural losses could be caused by fire.

During the period up to 1937 local authorities fixed the dates of the prohibited burning times in their own districts. In practice, this resulted in the prohibitions having only a minimum value in controlling fire losses. There was a multiplicity of dates of prohibited times which were not co-related in any way and frequently the district of a local authority was divided into many sections with differing dates, mainly determined on the basis of whether the particular section was already developed or whether development was just commencing. Burning took place during the most hazardous part of the summer in the more undeveloped sections, with the result that fires continually menaced the adjoining areas and districts which had reached a more advanced stage of development. Extensive fires from this cause also seriously affected the forest areas. In the late 1920's and early 1930's some voluntary groups had formed in the agricultural community in the south-west for the purpose of fighting fires on an organised basis. These early bush fire brigades had no legal basis or protection. In 1935 extensive and serious fires affected very large areas in the south-west. This brought a realisation that fire had become a major threat, both to our forests and to the agricultural community. A committee was appointed to review the position and as a result a new Bush Fires Act was drafted and approved by Parliament in 1937. This Act formed the foundation of the present organisation. It established a legal basis for the organisation of bush fire brigades and also for the determination of prohibited burning times from a State-wide point of view, rather than from purely local considerations.

The Committee which assisted in the drafting of the Act in 1937 continued to advise on the implementation of the measure and was set up permanently by an amendment to the Act, as the Rural Fires Prevention Advisory Committee. The first committee consisted of the Under Secretary for Lands as Chairman, the Conservator of Forests, the Chairman of the Agricultural Bank, the Chief Civil Engineer of the Railway Department, and the Under Secretary for Agriculture. A representative of the Road Board Association was then added. The services of an officer of the Forest Department were obtained to assist local authorities in organising bush fire brigades. The Secretary to the Committee was made available by the Department of Lands and Surveys on a part-time basis. In 1941 the representation of the Road Board Association on the committee was increased to three; one representing the South-

West, one the Great Southern, and the third the Eastern and Northern wheat growing areas, and a representative of the Fire and Accident Underwriters' Association was also added.

The majority of the early bush fire brigades registered were in the South-West and Great Southern districts, where the risk of serious loss by fire was accepted as greatest.

Following the war, great increases in stock numbers in the wheat-growing areas in the eastern and northern districts resulted in greater risk of loss from bush fires over a much longer period in these areas, and brought about the organisation and registration of large numbers of brigades in those districts.

In 1948 a private member's Bill was successful in having inserted in the Bush Fires Act the provisions relating to "approved areas". This principle came to have a very important bearing in later years, and has been dealt with as a separate subject. In 1949 the principle of permits to burn was introduced. In 1950 the Committee suggested the representation of the Road Board Association should be increased by one member, for the purpose of considering further proposed amendments to the Bush Fires Act. There were then four zones of the Road Board Association mainly concerned in fire prevention and control and only three of these were represented on the Committee. The Act was later amended to provide for this additional member. It was at this stage that the committee first intimated a desire for a reconsideration of the Bush Fires Act as a whole and the powers of the committee itself. Extensive amendments were made to the Act in 1950.

In 1953 the committee recommended that action should be taken to redraft the whole of the Bush Fires Act, retaining its existing principles, but consolidating it and endeavouring to secure some greater degree of flexibility on some matters. It was also considered that the penalties had become most inadequate as an effective deterrent, and that provision should be incorporated as a major principle to grant the committee statutory powers and to enable it to engage its own staff and to generally administer the Act.

Field staff were required to keep up [blank] standard of approved areas with more regular inspections, to help in advising local authorities and local officers and with the intention of assisting and supporting volunteer officers who had difficulties in making decisions regarding the issue or refusal of permits to light developmental fires and other local matters concerning the application, to their immediate neighbours, of some of the provisions of the Act. The Bill was drafted, but the Government would not proceed with it in 1953 because of an extremely heavy legislative programme. This delay had some advantages, as the Bill was available for a period to local authorities and other organisations throughout the State, and numerous changes were made in the original draft before it was finally presented and approved by Parliament in 1954. The Bush Fires Board was constituted in 1955, with a membership similar to that of the Advisory Committee, with the addition of a further representative of the Road Board Association, as that body then had five wards or zones covering the main fire prone areas.

Bush Fires Board:

The Bush Fires Board has built on the policies which had become established by experience through the Rural Fires Prevention Advisory Committee, but has also undertaken many fresh activities. Some of the major subjects which have been dealt with are submitted hereunder:--

Staff:

The secretary of the Advisory Committee was also the Officer-in-charge of a branch of the Department--that is the Department of Lands and Surveys--the staff of which had been inflated to some degree, to cope with the work under the Bush Fires Act; no staff was actually detailed for specific duties for this committee.

One of the first tasks of the Bush Fires Board was to organise its staff. The Lands Department made available the Secretary of the Advisory Committee for a period of 12 months until final decisions could be arrived at; this was to be on a full-time basis, but for various reasons other departmental responsibilities continued.

Subsequently the Secretary was relieved of his departmental duties, and a small clerical staff was appointed to assist in the organisation of office records, registration of bush fire control officers, bush fire brigades, etc., and with inquiries and correspondence.

In the fire season before the Board was constituted an experienced officer from the Field Staff of the Lands Department, Mr. Hale, was selected to form the nucleus of the Board's field staff. The Board's original intention was to have the main fire prone areas of the State divided into five districts, with a warden for each district. At the commencement, however, the Board decided on three districts and field officers until experience had been gained in building up and training its staff.

In selecting the Wardens, the Board looked more to country background, experience and personality of the applicants. As the fire control and fire-fighting organisation is almost entirely voluntary, the Board desired its Field Staff to be men capable of securing the co-operation of the Local Authorities and volunteer officers, and of improving standards, rather than exercising any form of direct control.

Due to problems of housing and personal consideration, the Board has experienced difficulties arising from rather frequent changes in its Field Staff.

In 1960, it was decided to divide the district comprising the South-West and Great Southern areas to enable the experienced Warden to concentrate on the South-West area where major problems existed. Unfortunately it also became necessary to replace a Warden in the Northern District in the same period. A further new Warden was appointed to cover the bulk of the area previously the responsibility of the Senior Warden, in order to make the latter available for general oversight and assistance in dealing with the more important problems arising in various districts. Thus the Board commenced the 1960/61 season with three new Wardens.

EDUCATION AND ADVISORY SERVICE:

In the latter years of the Advisory Committee, there had been an increasing demand for assistance at district meetings of brigades, control officers, etc. There was also a considerable build-up in correspondence seeking advice and information. It became evident at this period that it was only practicable to give full attention to the more major problems in the weaker districts. It was noticeable that standards were not being maintained in many districts which had been regarded as well organised. There were also, however, at this stage, nearly 3,500 volunteer Bush Fire Control and Brigade officers.

As one means of obtaining direct contact with the volunteer officers, the quarterly publication "The W.A. Fire-fighter" was established. The Board also organised and ran an annual Fire Control Officers' School and Conference.

Quite a number of "one day" demonstrations and lecture programmes have also been given in individual districts. The district Wardens have found that this work has had very good results, but there are some districts yet to be covered and others where day courses of instruction could well be repeated.

FIRE PREVENTION.

A considerable part of the work of the Advisory Committee, and later the Bush Fires Board, has been devoted to fire prevention. There is an annual publicity campaign covering all available media. For some years the Advisory Committee organised a fire prevention week. This was ultimately abandoned, mainly because of the difficulty of timing the week to suit conditions in different parts of the State. Any week/s elected was too late for some areas and too early for others. It was finally decided it would be better to spread the publicity over the whole fire season. The Board prepares considerable numbers of posters and fire warning notices which are distributed each year free of cost to local authorities and various organisations. The Board also makes available free of cost to local authorities fire prevention road signs.

<u>Prohibited Times</u>:

In this State, the term "prohibited burning times" means an almost total prohibition on the lighting of fires in the open air. In these periods some fires may be lit under special conditions for the disposal of rubbish, carcases of animals, fires for camping or cooking and fires for burning for the purpose of collecting clover burr.

Prohibited burning times declared before the commencement of the fire season have been a feature of fire control in Western Australia from the earliest period. This has been practical because of the regularity of the summer weather pattern. Considerable pressure has been brought at various times

on the Advisory Committee and the Bush Fires Board for a variation of the dates normally fixed, but generally there has been acceptance of the principle of the prohibition. In the Act of 1954, some discretion was given to local authorities to vary dates declared each year, with the exception that they cannot make the concluding date earlier. In some cases requests for concessions in the dates fixed for the prohibited times have been based on the development and organisation of bush fire brigades, and provision of firebreaks and protective burning carried out rendering, it was claimed, some relaxation of the prohibited times possible.

Restricted Burning Times:

From the 1st October until the commencement of the prohibited time and from the end of the prohibited time until the 31st May, fires may only be lit if a permit is obtained and there is compliance with a number of other conditions, i.e. notification to neighbours and the local authority, the provision of firebreaks to surround the area to be burnt, that the fire must not be lit on a Sunday, that a minimum of three men must be in attendance etc.

There is another rather important provision: that a fire may not be lit on a day when a dangerous fire hazard is forecast by the Weather Bureau. There are also provisions under which local authorities may appoint fire weather officers who are entitled to allow burning on a day of dangerous fire hazard.

Control officers who are authorised to issue permits can insert additional safeguards in the permits. The Advisory Committee realised for many years that there were deficiencies in the dates fixed for restricted times, but it was not practical at that stage to allow for variations in conditions and seasonal factors, and the periods fixed in the Act were determined to cover all areas. Power now exists in the Bush Fires Act to vary the conditions applying during the months of October-November and April-May in the restricted burning times in individual districts in the light of seasonal conditions.

Emergency Periods --Total Bans:

The Minister has power to declare a fire emergency period, during which no fires of any type may be lit in the open air, except with the authority of an officer authorised by the Minister. There has been much misunderstanding in country areas regarding the bans which have been applied. They have never been imposed purely because there were dangerous fire hazards on a

A.H. SUTHERLAND,
9/5/61.

particular day, but only when it seemed there would be a worsening in the fire conditions, giving rise to extreme conditions. The major difficulties have arisen of course when the extreme conditions forecast have not actually occurred, and also because it is difficult to determine boundaries which are easily understood, with a result that some areas where it is known risks will not be extreme have to be included.

APPROVED AREAS:

In areas declared "approved" under the relevant provisions of the Bush Fires Act, crop fire insurance premiums are reduced by 25 per cent from the rates charged in areas not approved. The number of local authorities' districts now declared is 71. The Advisory Committee originally opposed this proposal, as it felt premium rates would be adjusted in relation to losses and there would be no great financial gain. The declaration of approved areas has, however, proved to have considerable value in assisting the Board to maintain standards, particularly since the Board has had staff available to carry out a regular thorough annual inspection of each district. A great deal of consideration was given to establishing standards for approved areas, but this was finally decided to be impractical because of the wide variation in conditions.

In approved areas consideration is given to the following factors: -

(1) The efficiency of the bush fire brigades and the fire fighting equipment available to them.

(2) The overall district organisation of the brigades.

(3) The standard of firebreaks and protective burning carried out.

(4) The nature of the fire hazards in the district.

(5) The attitude of the local authority towards fire prevention and control and enforcement of the Bush Fires Act.

Each approved area has throughout been considered individually on its merits.

FIREBREAKS:

The Bush Fires Board has insisted on adequate pre-suppression measures in all "approved areas" and also that all local authorities, whether an "approved area" or not, should accept their responsibility and ensure that all residents in their districts should bear their share of the necessary work. The Bush Fires Act provides extensive power to local authorities to order firebreaks. If this responsibility is not accepted by the local authority, there are provisions in the Act which would, with the Minister's concurrence, enable the Board to act to order firebreaks in its own name.

The Board has gone to considerable lengths to avoid final action to enforce firebreaks itself, as it considers far better results are achieved where a satisfactory position is reached by local co-operation and action by the local authority. The Board's officers have done everything possible to encourage the enforcement by local authorities of a reasonable standard of firebreaks on all properties.

The Board has also made the wardens available to carry out, with the local officers, inspections in individual districts to assist and to take responsibility for determining standards of firebreaks and deciding those property owners whom they consider should be prosecuted. It thus accepts the responsibility of determining those who should be prosecuted, which is frequently an unpopular local decision. The Board will not accept the responsibility of prosecuting for breaches of a local order.

FIRE FIGHTING EQUIPMENT:

The water problems in many parts of this State have resulted in portable power pumps being available on most properties, particularly in the wheat and sheep areas. In most cases it has not been a far step to equip them also for fire fighting. As a result, there are a very large number of vehicles equipped with tanks, pumps and hoses, and these have been a major factor in controlling fires in a very large number of districts. In addition, many local authorities have provided central fire tenders, and brigades have also acquired their own equipment in many cases. The question could arise as to whether reliance could be placed on privately owned equipment. Experience has been that privately owned equipment has almost invariably been readily made available for fire fighting and also to assist in putting through developmental burns on properties in the district. It has also been invariably forthcoming to go to other districts if a serious fire occurs. The availability of privately owned equipment has been a major factor in fire control in many districts because it is usually close to the scene of an outbreak and there is a rapid attack on most fire outbreaks, where time would be lost if there were greater reliance on centrally situated appliances. The main danger has been in the fact that in some areas the large amount of fire fighting equipment available has tended to breed a false sense of security and to draw attention away from the necessity of pre-suppression and prevention measures. The major deficiencies in equipment exist in districts where the predominant form of agriculture is dairying for the production of butterfat. This industry has not been as prosperous as the other agricultural industries and also in most cases water supplies are not such a major problem. In such areas local authorities and brigades have a greater problem and more responsibility in regard to the provision of fire fighting appliances. Certain deficiencies also occur in some of the outer metropolitan districts, where such district problems as absentee ownership of land, residents working outside the district, etc., create difficulties in organising brigades and obtaining the necessary finance to purchase brigade equipment which is not generally available privately, due to the small size of the properties, mainly large residential, small orchard and the like.

There has been a tendency in districts adjoining forestry areas to rely on the Forest Department for the provision of major fire fighting equipment. This has always created a problem for the Bush Fires Board in endeavouring to encourage areas to become self contained. Again in country adjoining the Darling Range escarpment the bulk of the fire fighting equipment available is suitable for its purpose on the level country below the scarp, but greater capacity to carry water is necessary to fight fires along the escarpment itself. Suggestions have been submitted to the Board for the setting up of a special authority covering the Darling Range Scarp. The Bush Fires Board does not consider this would be practical as the number of residents involved in the scarp is not great and reliance must be placed on the bulk of the

district below the scarp to provide fire fighters and equipment sufficient to be able to deal with fires in the scarp area. The Board considers it would be difficult to determine boundaries, and in any case these would cut across existing local districts. Local authorities would be opposed and it seems any problems can be handled through existing organisations. Some additional equipment is the main need.

BUSH FIRES ACT:

Since 1937 the Bush Fires Act has been the subject of numerous amendments. In all cases these have been made in the light of experience to correct anomalies and deficiencies, to close loopholes, and to meet changing circumstances and new developments. In the main, the present Act has proved sufficiently flexible to meet most problems. Many complaints made regarding the Act have been due to ignorance of some of its provisions and their varying application and the important fact that the Act applies throughout the State and there must always be some local peculiarities which it is difficult to meet.

FINANCE:

The Bush Fires Act provides that local authorities may expend their revenue in equipping Bush Fire Brigades and in most other matters of fire prevention and control. This has been the only official source of finance for fire control and prevention in this State. A great deal of finance has been provided privately and by brigade effort. The Rural Fire Prevention Advisory Committee and later the Bush Fires Board have given consideration on many occasions to the question of various forms of Government subsidy to Bush Fires Brigades or to local authorities for equipment and other purposes. The decisions arrived at which have been consistent over a period of some 20 years are that any general scheme of subsidy would be most undesirable under the conditions which had developed in this State.

In the big majority of districts there is adequate fire fighting equipment and in quite a number of instances local authorities have expended considerable amounts in providing equipment and in assisting bush fire brigades. The very large majority of local authorities have always strongly opposed any suggestion of Government subsidy, although there have been pressures at times for contributions from insurance companies. The reasons for the opposition to Government finance have been that it is unnecessary, and that it is preferable for equipment to be provided from local funds when there would be a much greater chance of its being maintained in good order. So far as local authorities are concerned, there has also been the fear that Government assistance or any scheme of subsidy would inevitably bring greater centralisation and oversight of the organisation generally. The opinion has been very strong that any extensive scheme of financial assistance would encourage the attitude that bush fire brigades were a service rather than a co-operative community undertaking. It has been a particular feature of fire control in this State that it is regarded in the country areas that fire fighting is the responsibility of everyone in the district. On occasions it has been noticeable that where local authorities have provided substantial equipment, there has been a definite tendency for the attitude to develop that fire control is a service provided by the local authority.

Whilst equipment provided by local authorities has an important part in fire control, the main strength in this State has been the much greater quantity of equipment available from brigades and privately owned equipment of their members.

Undoubtedly there is a small minority of districts where fire fighting equipment may be regarded as deficient. In most cases the Bush Fires Board considers the position can be largely met by the local authorities and brigades themselves making a greater effort.

It is the local authorities in the South-West section of the State which would be mainly concerned from this angle, and it is interesting to note that at a conference of South-West local authorities, as recently as April, a motion advocating Government assistance to provide fire fighting equipment was strongly opposed, and the motion was lost by a considerable margin.

Bush Fire Brigade Expenses:

In the Bush Fires Act of 1937, provision was made that in certain circumstances a bush fire brigade could claim expenses from the occupier of a property on which the fire occurred. In 1949 it was provided by an amendment to the Act that following a prosecution for an offence against the Act any expenses incurred by brigades as a result of the offence could be recovered, and the original section for the recovery of brigade expenses was deleted.

The Advisory Committee and later the Bush Fires Board have made a number of attempts to have the original provisions re-inserted in the Act because these did not require a prosecution. There was considerable opposition in Parliament to this provision, because it was necessary to create a liability to pay expenses on every occupier who had a fire on his property. Sight seemed to be lost of the fact that although the liability was created on every occupier who had a fire on his property, a charge by the brigade could only be raised by the brigade, stating that it wished to recover expenses and then obtaining the approval of the local authority in the district which could then raise a charge. The maximum of £100 was set to the expenses which could be claimed. Many brigades, local authorities and the Bush Fires Board consider this type of provision is warranted. There are many cases where it is not desired to take a prosecution for various reasons, or where it may be very difficult to obtain sufficient evidence to sustain a prosecution. None the less, it is felt that the occupier concerned may be careless and generally unco-operative in fire control matters, and that the ability of brigades to charge expenses would be a deterrent. As the brigades comprise local residents, the Bush Fires Board felt very strongly that such a power would be used only where there were very good reasons and not as a general practice.

Bush Fire Control Officers:

There are 1,548 registered bush fire control officers. The original intention in the 1937 Act was for the Bush Fire Control Officer to fill a co-ordinating role with only one officer for a local authority's district. Any restriction on the numbers of officers appointed was removed when the Bill was in Parliament because of the very large extent of some Road Districts and the possible necessity of a control officer being appointed for each ward of a Road Board. To set up their fire control organisation, many local authorities appointed numbers of control officers and in some cases the number of appointments made was regarded as excessive, particularly when brigades were established.

When it was later made the responsibility of Control officers to issue permits to burn, it was obviously necessary for there to be a reasonable number of officers available so that they would have an intimate knowledge of the areas for which they were issuing permits and also that it should not be unduly difficult to obtain a permit. A provision was afterwards made that local authorities should prescribe the seniority of the officers they appointed. It has been possible to make working arrangements in most areas that are practical. In many cases the Captains or Officers of brigades are also

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appointed control officers on the basis that the persons responsible for controlling fires should also have jurisdiction in relation to the fires that are lit. The Bush Fires Board has no discretion in regard to registering Bush Fire Control Officers and must register those who have been properly appointed by a local authority.

Bush Fire Brigade Organisation:

There are at present 742 registered Bush Fire Brigades for which 3,250 brigade officers are registered. The term "Bush Fire Brigade" includes many different types of organisation and rarely does a registered brigade cover only a single self-contained fire fighting group. In most cases brigades are comprised of a number, and in some instances, a considerable number of separate self-contained sections. The Bush Fires Board is opposed in principle to very large and extensive brigade organisations, as there has been a tendency for them on occasions to split into factions and to have considerable domestic problems and frictions. Some of these large brigades, however, are quite efficient, are well organised and operate quite satisfactorily, and the Bush Fires Board has been able to deal with the matter only where difficulties have arisen. Often it is only a question of a difference in terms, as the separate sections of a large brigade may operate in effect as independent and separate brigades in which case the brigade as such fills mainly a co-ordinating role. The Bush Fires Board regards this mainly as a domestic matter unless problems arise or there is obvious inefficiency. It is desired to stress that the number of brigades registered by no means gives a true indication of the extent of the actual organisation.

Most of the brigades have been able to handle all the fires occurring in their area over perhaps quite long periods, and in some cases this has led to weaknesses in district co-ordination when a fire on a major scale does occur.

In many cases in the early stages of the organisation of a fire control set-up, local authorities first appointed Bush Fire Control Officers so that some authority existed under the Bush Fires Act until brigades could be formed. In some districts brigades were never formed, and they continued to operate under control officers for many years. The Bush Fires Board is, in general, opposed to this organisation, because it considers there is inadequate protection afforded to fire fighters. Until a control officer arrives at a fire, the fire fighters in these circumstances have no authority under the Bush Fires Act, nor are they protected under the bush fire fighters' insurance policy. There is also an objection that there is no definite body of organised fire fighters under this system.

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In one district in particular, the position is something of an exception. The district concerned originally had registered brigades, but for various reasons, these had not been very active and after a period had virtually gone out of existence. To meet the need for protection, the local authority carefully selected a number of sound men in various parts of the district and appointed them control officers. In this particular district, undoubtedly the control officers selected did a very excellent job with the support and encouragement of the local authority. In actual practice, they virtually operate as brigade groups because each officer is supported by the settlers in his area should a fire occur. The Bush Fires Board still has some concern, however, that the protection of fire fighters under the Bush Fires Act is not ensured as fully as it would be if brigades existed.

Advisory Committees:

In a number of districts in the South-Western and Great Southern, the Board has encouraged the formation of local Advisory Committees to co-ordinate brigade policy and planning, and to assist the local authority for their district, particularly in regard to determining cases for prosecution and for enforcement of firebreaks, fire prevention measures, etc., and in planning district fire control.

State Emergency Service:

In 1959 the State Emergency Service was set up to cope with civil disasters, including fires, floods, etc. The Service was intended to supplement normal local or departmental activities in those cases where control was beyond local resources. There is no special legislation governing the State Emergency Service. Under the Bush Fires Act the Minister for Lands has power to declare an emergency period and then to appoint an officer to take charge of fire fighting operations. In recent major fires in this State, the Emergency Committee organisation was most valuable in providing ready contacts and a knowledge of various plant and services available in emergency.

Major Fires:

The Bush Fires Board has no defined responsibilities in relation to major fire outbreaks. Responsibility has been accepted, however, for organising assistance in those cases where local resources require reinforcement. The Board is also in a better position to organise the assistance of equipped brigades from other districts, the supply of special weather forecasts, to obtain spare parts for equipment, etc. Before the Board can take any action, it is dependent on advice from the local authority concerned. There is no requirement for a local authority to advise the Board immediately of any fire, even if the outbreak is attaining major proportions.

Where assistance is requested, an officer of the Board is sent to the area as quickly as possible, not necessarily for the purpose of taking charge, but to assist in local organisation, to co-ordinate requests for outside assistance, if any, and to keep the Board's headquarters informed. Where the



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assistance cannot be provided through brigade organisations in other districts nor through the Board's other sources of voluntary assistance, then the State Emergency Service affords a practical means of rapidly obtaining equipment and manpower which cannot be found from the Board's own resources and contacts. If a fire should have attained proportions requiring the co-ordination of a number of districts, the Bush Fires Board is in the best position to provide it, because of the knowledge of its officers of the local organisations.



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In connection with the Dwellingup fires, it was felt very strongly that it was desirable, even if only as a precaution, to set up a pool of experienced fire fighters and equipment drawn from districts which were not threatened. None of the local authorities involved with the fires, however, desired such a pool and there is no authority or finance for the Bush Fires Board to organise this, even as a precautionary measure. There are very strong local objections to the Police being used to take charge of fire control operations. Where the district organisation is not strong, some action for overall co-ordination may be essential. However, it must be effected in close co-operation with the local fire control officers and brigade officers. The major objection to the Police taking charge is of course the lack of knowledge of the district officers and organisations. In any case, there is no authority unless by an officer appointed by the Minister under the emergency provisions of the Bush Fires Act, to override the authority of a bush fire control officer under the Bush Fires Act.

It is considered the State Emergency Service is an extremely valuable organisation, and it was of very great assistance in recent fires. However, in dealing with fire, it is considered that requests should be channelled in the first instance through the Bush Fires Board, and that emergencies should not be declared or overall controllers appointed without reference to the Bush Fires Board.

Communications:

The vital need at all major fires since the inception of the Bush Fires Board, has been for the establishment of adequate communications by radio on the fire perimeter. Very few local authorities' districts are provided with radio communications networks and undoubtedly this is a major deficiency in the fire control organisation. Several years ago, a number of demonstrations were organised, but the response has been disappointing. The general attitude is that if local authorities purchase this equipment, they will have difficulty in ensuring that it is maintained, particularly in view of the infrequent use required for fire control purposes. Undoubtedly the greatest need for communication equipment is in the Great Southern and South-West districts. The Bush Fires Board had decided that it will approach the Government for finance to obtain its own emergency network. Not only will this provide networks for emergency use, but will also enable the board to undertake a much more effective programme of demonstrations and training in the use of this type of equipment. In recent fires the only communications assistance obtainable was through the State Emergency Service, either from the Police or the Army. The Police communications are unsuitable for fire purposes, due to the frequency on which they operate. The Army did an excellent job in the Keysbrook sector of the Dwellingup fires, but were not of great assistance at Gidgegannup. It is considered that reliance should not be placed on the Army for this purpose, because the operative Army units are frequently engaged on exercises in remote parts of the State, and in any case the equipment available is not always entirely suitable in connection with fire fighting.

At the Mayanup fire some years ago, this board organised a radio network from private sources. The sets were installed in control officers' vehicles and communications were maintained with very good results. Similar action was taken in connection with a serious fire in the Wagin district, and this network also operated successfully.

The Board's intention is to have sufficient sets held and maintained at its headquarters to meet emergency requirements. Most areas in the South-West and Great Southern can be reached from Perth in three to four hours, and in some cases, much less. It is felt this proposal will go a long way to meet emergency needs and is regarded as vital to deal with future serious fire outbreaks, until such time as districts can be persuaded to install their own equipment. Even if individual districts do obtain radio equipment, it is only likely to be on a scale which will require reinforcement in any major fire.

Back Burning of Firebreaks:

The Bush Fires Act contains a provision that it is illegal to light back fires for the purpose of creating fire breaks, except by the direction of a bush fire control officer or if no control officer is present, by the Captain, other officer or member of a bush fire brigade.

Prior to this restriction, back fires lit by private individuals frequently caused as many difficulties as the main fire itself.

It is also provided in the Bush Fires Act that any damage caused by bush fire control officers or bush fire brigades in endeavouring to control a fire, must be regarded as damage by fire within the meaning of any insurance policy. In past experience damage caused by back burning has always been accepted throughout the country areas as if the damage were caused by the main fire. The general view is that in almost all cases the country would have been burnt by the main fire in any case.

Chittering Fire:

The Chittering district is a difficult one, as it adjoins and includes considerable rugged timbered country to which access is a major problem. The Bush Fires Board did not carry out any major investigation of this fire because it has become the subject of a coronial inquiry. This fire first started about mid-December. Part of the original fire was controlled, but apparently this or another fire burnt in inaccessible areas near or on an area under the control of the Army and used for training purposes.

On the 21st December, the Forest Department advised the Bush Fires Board that a fire was burning in the western part of the Toodyay road district, north of the Army training centre. This information was passed on to the Toodyay Road Board, the Secretary of which subsequently advised that the fire was in very rugged country, to which access was extremely difficult, if not impossible. The fire was not at that stage a threat to property, and the only practical action they considered was to keep the fire under observation with a view to taking further action if it is spread to more accessible country.

Local groups from Chittering and Swan Road Districts fought various faces of the fire at periods up to the 24th December, when the fire threatened a number of properties. On the afternoon of the 24th December, a bush fire control officer of the Chittering district advised that the fire was under control, but continuous patrol would be needed and there would be difficulty in organising this from local resources, as most residents had been fire fighting for a considerable period. The possibility of obtaining assistance

from the Army was discussed, but he was informed that this could not be regarded as an emergency, at least until an assurance could be given that assistance from other parts of the district or adjoining districts was exhausted or unobtainable. At the request of the control officer, the Forest Department was advised of the situation, and that local brigades had asked whether the Department could assist. On the 25th December, it is understood the Forest Department made a power saw available and also some water. The local brigade officers reported that they had continued to patrol the fire during the following week, but under bad conditions on the 1st January, the fire jumped a considerable distance and broke out in a pasture paddock.

The Army did assist in the New Year and the Senior Warden of the Bush Fires Board also attended the fire. The Army was not called in by the Bush Fires Board, but presumably by some direct arrangement, because Army property was involved. The fire was finally controlled on the 3rd January. The Bush Fires Board considers that the Chittering district could be better organised and that more could be done by the local authority in fire prevention and control. The Bush Fires Board was also concerned that many residents left their properties in this area for seasonable holidays, although they must have been aware that the fire was burning in the vicinity. Most of the timbered areas affected by this fire were in private ownership and the fires were not on land controlled by the Forest Department.

DWELLINGUP FIRES.

There is no doubt that the fires in the Dwellingup area were caused by lightning. There was considerable confusion on the western side regarding the progress of the fires. Many complaints were made that the Forest Department advised local officers inquiring for information that the fires were under control, when this was obviously not so, and the fires were threatening settled areas. This appears to have been due, at least to some extent, to the fact that under the extreme conditions, fresh fires had broken out in the vicinity of the escarpment, or that fires were lit in the original lightning strikes, but smouldered, to break out later.

The major threat to agricultural areas was on the western side of the fire. The first district mainly affected was the Murray Road district (Pinjarra). The Serpentine-Jarrahdale area was then affected, and finally the Drakesbrook Road District (Waroona). On the eastern side, the Marradong Road District would have been seriously involved in the event of winds with a westerly influence. The fires affecting the latter district were controlled by local brigades without any serious damage occurring.

<u>The Murray Road District</u>:

This district was previously organised under bush fire control officers only, and without bush fires brigades. Brigades had been formed in the district mainly in the previous fire season but the new organisation had not had sufficient time to settle down completely. The main deficiency appears to have been that a chief fire control officer for the district had not been appointed by the local authority. A Local Advisory Committee had been recently formed, but had not had sufficient time to deal fully with district problems. It may have been intended that the chairman of the Advisory Committee should fill a co-ordinating function in the district, but this point had not been clarified when the fires occurred. During the course of the fires the office of the local authority served as a district co-ordinating centre. It was the general opinion of practically all officers concerned that the brigade organisation had proved itself in the fires.

There has been a good deal of publicity given to criticism in this district regarding the back burning carried out by the brigades and control officers. The criticism arose mainly from fires lit just after midday on Wednesday, 25th January, which did not link with the main fire. This is understandable, as light rain fell in the evening. The control officers concerned were no doubt influenced by the morning weather forecast which indicated that further strong to gale force easterly winds could be expected that night and they must also have been influenced by the experience of fire behaviour under the conditions which occurred in the preceding days. Extensive bulldozed and graded firebreaks had been prepared in the area, but it was the general opinion of control and brigade officers that these breaks would have been quite inadequate and valueless to stop the fire under the conditions expected, particularly from the experience of the preceding days and nights. It was necessary to make a decision to burn back while conditions were still favourable and before the development of the strong easterly winds which were expected.

The Bush Fires Board has given consideration to this matter, and was of the opinion that had any of the property damaged been insured, there would have been a legitimate claim under the insurance policy. A recommendation was submitted to the Disaster Relief Committee that the damage should be treated on the same basis as if it had been due to the main fire, and also that any Government assistance or concessions made in relation to replacement of fencing should be extended to the properties affected by the back burning operation.

The main losses in the district were those which occurred in the townships of Dwellingup and Holyoake, and damage to small holdings within the forest area. The agricultural losses in the main settlement areas were comparatively very light.

Serpentine-Jarrahdale District:

This district has no bush fire brigades and operates only under bush fire control officers. In this case, however, the organisation must be regarded as efficient, apart from the inherent disadvantages where there is no brigade organisation. The chief fire control officer is the manager of a local timber mill and chairman of the local authority, and has a detailed and unrivalled knowledge of the timber and forest areas and of the escarpment. His knowledge and also familiarity with access and tracks in the area was of considerable importance to the fire fighting in this section. Because of his intimate knowledge, he took charge of the organisation of the various fire faces, whilst his deputy took charge of the central base establishment at the Keysbrook Post Office.

The Bush Fires Board District Warden attended this fire, and a copy of his report is attached hereto, together with a report by the Secretary of the Bush Fires Board, respecting the assistance organised by the Board. Agricultural losses incurred were relatively very light.

During the course of the Keysbrook fire, another fire occurred in the vicinity of Jarrahdale, which was thought to have been due to a fire lit by picnickers. This fire was brought under control from local resources. Control in this case was considerably assisted by the regular patch burning which had been done in the vicinity of the fire outbreak over a number of years.

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Drakesbrook District:

This district only became seriously involved on Tuesday 24th January. The small mill town of Nanga Brook was burnt out, but other agricultural losses involved were minor. The district is reasonably well organised, and local control worked in close co-operation with the Forest Department at Harvey, as a result of which there was much less confusion than occurred in the other areas, because there was time to plan their operations. No back burning was carried out in this area on the Tuesday, but some burning was undertaken on the Wednesday to link up with the work done in the Murray District. They fully supported the back burning which had been done in the southern section of the Murray district, as it linked with their own basic defence line.

Gidgegannup Fire:

This fire is believed to have been caused in the first place by lightning, but it is probable the local authority will lay charges in the Bush Fires Act respecting subsequent incidents which are believed to have contributed to the escape and spread of the fire. The Bush Fires Board organised a good deal of assistance from brigades outside the area affected. Had this fire crossed the Toodyay Road, under the conditions experienced, it is considered that extensive damage would have been incurred. Attached hereto is a copy of reports by the Board's officers regarding this fire.

Mandurah Fire:

This fire was reported in the afternoon on Friday, 3rd March, as a major threat to Mandurah township. The local authority reported a fire to be only two miles from the outskirts of the settlement. Assistance was organised, but from that stage on, no information could be obtained from the local authority. The Mandurah district is extremely narrow, and it was later found that this fire was mainly in the Murray Road District and was being fought by their brigades.

They did not consider that an emergency had been necessary, especially in the despatch of medical teams and ambulances. These apparently were provided through the State Emergency Service as a result of a direct appeal from the local authority. From the reports originally received there was no time for consultation if assistance provided was to be effective in preventing serious damage.

Augusta-Margaret River:

The Bush Fires Board has been concerned at the position in this district for quite a number of years. Whilst there are a considerable number of brigades covering the many small settlement areas, it is considered that these have lacked overall co-ordination, and that fire fighting equipment is somewhat deficient. The local authority has no permanently equipped fire tender. A local Advisory Committee has recently been formed, and the Bush Fires Board hoped that this would ultimately bring improvement. In part, the problems of the district stem from the climatic conditions. Even through the summer months this district is normally subject to moist conditions which considerably reduce fire risks. A bad fire season only occurs occasionally, and it is apparent that the effects of the abnormally dry season this year were not fully appreciated locally. The Bush Fire Board was not directly concerned with the fires which occurred in the area, the assistance provided was presumably organised direct by the State Emergency Service.

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There was a good deal of local criticism of the fact that the Police took charge of the fire fighting in this area. It is generally agreed that the Police Officers concerned did not spare themselves, but the brigades considered much confusion was caused because of the lack of knowledge by the Police of the brigade setup, their officers, etc.

The fires were investigated by the Senior Bush Fire Warden and the District Bush Fire Warden, and a copy of the Officers' report is attached.

Denmark:

The fires in the Denmark district were attended in the latter stages by the District Warden and the Senior Bush Fire Warden. The local brigades involved had done reasonably good work, but there was lack of co-operation, and it is considered they did not receive the support they should have had from the other parts of the district not directly affected. Copies of the reports of the Board's Officers are attached.

Other Fires:

Serious fire outbreaks also occurred in the following areas:

Kalamunda-Gooseberry Hill-Lesmurdie
Williams (Tarwonga)
Upper Blackwood
Pemberton-Northcliffe

Any further information available in connection with these fires can be supplied if required.

Forest Department--Protective Burning:

There have been wide-spread general complaints from all districts concerning what is claimed as lack of effective protective burning by the Forest Department in areas adjoining settlement. It must be pointed out that in some areas co-operation between the Department and the local brigades is good. Where forest land adjoins settlement, it is considered the Bush Fire Warden can assist considerably in co-ordinating protective burning programmes between local brigades and residents and the Forest Department Officers concerned.

In many instances there appears to be considerable misunderstanding respecting the responsibility accepted by the Forest Department for fire protection in timbered land. Some of the land involved in the complaints is Crown Land or Reserves over which the Forest Department has rights in the timber only, and in such cases it does not accept responsibility for fire protection. In other cases, the land is privately owned and the timber is being cut by private saw mills. In these latter cases, the Bush Fires Board is taking steps to advise local authorities of their powers to order action to be taken for the reduction of fire hazards. This power does not extend to Crown Lands.

Bush Fires Board decisions:

A special meeting of the Bush Fires Board was held on the 14th March to consider various matters arising from major fires which had occurred during the fire season and a copy of the Board's minutes covering the decisions made, is attached hereto.

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BY THE COMMISSIONER: Thank you. That will be a very useful report to the Commission, I am sure. You will realise that the Commission will have to place a good deal of reliance on the advice it obtains from your Board; and when it questions you on some of these matters some of the questions may seem a little personal or difficult, but there will be a good reason for them?---Do you just want these reports put in?

I think that as they are reports made to other people, and only copies, they should be tendered as exhibits. That does not mean that I will not want to question you on some aspects of them; I probably will.

EXHIBIT EXHIBIT A1 to A6. Reports.

A1 - report on fires attended by Senior Warden H. J. Hale.

A2 - reports by Senior Warden Hale and Warden Straker on the Denmark fire.

A3 - report by Warden Straker on the Serpentine-Jarrahdale district, Keysbrook fire.

A4 - report on Keysbrook fire by the Secretary of the Bush Fires Board.

A5 - report on fires at Lesmurdie, Gidgegannup, Mandurah and Denmark by the Secretary, Bush Fires Board.

A 6 - Minutes of the special meeting of the Bush Fires Board held in the office of the Under Secretary for Lands on Tuesday, the 14th March, 1961.

THE WITNESS : I would explain that in the copy of the Board's minutes you have been given there is a reference to a report in certain pages of one of our files. Although it is a report tendered by the Serpentine - Jarrahdale Road Board, it is practically identical with the report submitted and which you have now marked as Exhibit A3. So, if you wish to refer to the report mentioned in this Board's minutes, Exhibit A3. will be it.

THE COMMISSIONER: Very well?---I would request that paragraphs 4 and 5 on page 3 of Exhibit A5. be not published in any way. They concern the question of the outbreak of a bush fire which is a matter of our own officer's opinion, and which is the subject of a coronial inquiry.

You ask that those paragraphs be regarded as confidential?---Yes.

I think you said that the present Bush Fires Board was formed in 1955?---Yes.

Can you tell me when you were appointed Secretary?---I acted as Secretary from its inception. I was appointed Secretary of the Advisory Committee, I think, in 1946. For some reason I appear to be unable to get away from this. I was the Minister's Secretary from 1934 to 1942, when I had a good deal to do with the 1935 - 37 Act.

That is what I was driving at; to get your background with bush fire fighting?---In the very early stages the Minister's Secretary came in for a lot of the work and the drafting of the original 1937 Act, particularly from the road board angle. They came into it and had a lot to do with it.

Can you tell me if the Bush Fires Board functioned fully during the 1955-56 fire season?---Yes.

There are certain representatives of the Railways Department and the Underwriters' Association, and the nominee of the Minister for Agriculture. Do you know if these gentlemen have fire fighting activities as part of

their background for being representatives. If you do not know, do not hesitate to say so?---The representative of the Railways Department is the Chief Civil Engineer who deals a lot with protective burning and fire protection on the railways. It comes under his department and that is why he represents the Railways Department. Mr. Curtis is an insurance underwriter and is nominated by that body. Mr. Barrett is the deputy chairman of the War Service Land Settlement Board. He was a farmer.

In the minutes of the meeting held on the 14th March, a Mr. Horrigan represented the Railways Department. Is it the custom for officers to be changed round as representatives?---No. He is an officially appointed deputy. There is provision in the Act for the appointment of deputies, and Mr. Horrigan is the deputy if Mr. Stewart it unable to attend. He is not a representative, but an appointed deputy. On occasions we have had representatives of departments who have not been appointed deputies but who have, by approval of the board, been allowed to represent their departments but not to vote.

I understand that if you have been officially appointed a deputy you do have a vote?---Yes; he has a vote if his principal is unable to attend.

With regard to the length of time these various members have been on the board, presume that Mr. Smith has been there since its inception?---Yes.

What about Mr. Stewart?---These I would have to check. The road board representatives have been changed at various times. I cannot remember them.

That would be quite satisfactory. If you can let me have a note giving the date of appointment of each of the present members, that will meet all I require in that direction.?---I shall do that. There was a carry-over from the old Advisory Committee, of course. I will give you the original dates.

On page 2 of your typewritten evidence, in the second paragraph you mention that the services of an officer of the Forests Department were obtained to assist local authorities in organising bush fire brigades under the 1937 Act. Can you tell me who that officer was?---Mr. Giblet.

James Giblet?---I could not give you his initial without checking. I think it was James.

In the last paragraph on the same page of your statement you say that in 1949 the principle of permits to burn was introduced. Does that mean that before 1949 there was no system of issuing permits; that men burnt as they liked as long as they observed the conditions?---No. They had to notify various people, but did not have to obtain the written permission of a fire control officer. The date there is 1949, but perhaps it is incorrectly phrased. That is the date it was put up by the committee, but the Government did not actually pass it, but withheld it until these other amendments came through in 1950; so, in fact, it did not become law or come into force until 1950.

On page 3 in the second paragraph at the bottom you say that the Road Board Association in 1955 had five wards or zones covering the main fire prone areas. Could you roughly indicate, in words, where those areas run, or is that not practicable?---Yes. There is the northern ward, or great northern ward I think they call it, which takes in most of the territory from Moora up in that direction. It is actually a good deal north of Moora carrying right across the agricultural land to Northampton. Then comes the Avon Ward, from the outskirts of the metropolitan area to Northam and taking in the district north to Moora. Then there is the eastern, which we might say centres on Merredin, Bruce Rock, and the districts in that area. Then there is the Great Southern from Beverley Ward down to Albany; and the South Western which is more or less from Serpentine, Jarrahdale, from Perth to Augusta and Margaret River, and across to Upper Blackwood. That is roughly speaking. I could let you have a map showing these areas.

It will be handy if we could get a small map which showed their relationship one to the other?---This increase in Wards came about by the creation of Avon Ward. The Northern Ward was a very big one -- The Road Board Association then had four representatives; and they took Avon with a slightly different type of interest and it was split away in about 1953 or 1954. That is where they got the additional representative.

And they still have five zones?---Yes.

The Mr. Hale to whom you refer on page 4 is the Mr. Hale who is here at the present time?---Yes.

You say that at the commencement the board decided on three district field officers. Could you tell me what these districts were?---There was a combination, very roughly; one warden had what we might call the South-West and Great Southern as one district. There was a Central District right up the line running to Kalgoorlie. There was a strip on either side of that and the other warden had the balance to the north. He has the biggest district in area because it is more scattered and more open country. Although he has a lot of ground to cover he has not the same problems.

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In the fourth paragraph you say that in 1960 it was decided to divide the district comprising the South-West and Great Southern areas to enable the experienced warden to concentrate on the South-West area where major problems existed. Who was the experienced warden at that time?---It was Mr. Streaker, and he covered the combination of the South-West and the Great Southern.

You go on to say, "Thus the board commenced the 1960-61 season with three new wardens." That means that with the two others the total was five?---Yes.

In the sixth paragraph on page 4 you refer to the quarterly publication "The W.A. Fire-fighter". Could you let me have copies of the issue of that journal for 1960 and for this year?---Yes, I will try to get you a complete set.

In the same paragraph you say that the board also organised and ran an annual fire control officers' school and conference?---Yes.

I understand they still run this school?---Yes.

Could you tell me how long they last?---We started the early ones with two courses because there were too many early nominees to handle in one group. There were two schools of three days. It was later decided it was too long for the officers to go right through to the second school, and it was combined into one of four days. It is really one of three and a half days, but covers a period of four days.

What type of instruction is given at that school? I notice it is a school and conference. I presume a good deal of discussion takes place?---It is run on the basis of discussion as far as possible. Lectures are given by our own officers and by officers from the Weather Bureau, and also from the insurance underwriters and the Fire Brigades Board.

So it is an academic training rather than fire fighting exercise?---It is only demonstration of equipment and a lecture given by officers from the Forests Department.

Then you say that quite a number of one day demonstrations and lecture programmes have also been given in individual districts; that the district wardens have found this work has had very good results. Is that on a one day basis?---Yes. Most of them start at 10.30 and go on till 10 at night to get a better coverage.

In the first paragraph on page 5 you say that the board prepares a considerable number of posters and fire warning notices which are distributed each year free of cost to local authorities. Could we see those at some time or the other?---We could send them up. We will get some of the examples that we have and send them up to you although some of them are now with the printer for next season.

Then you refer to road signs. I wonder whether these are the ones that we see exhorting people to be careful of fires, etc.?---Yes.

Have you any signs which are removable and replaceable?---This has been left entirely to the local authorities. They are sent out in a form to enable them to be bolted to posts. We have had difficulties about replacements to damaged signs. Unfortunately they have not removed the damaged signs. We do not handle that ourselves. We get the sign constructed and send it to the local authorities.

Some people think that a permanent sign loses its value -- that it eventually becomes part of the landscape; that people become accustomed to it; whereas, if you have a sign which has a striking message which could be taken down in the winter and put up in the summer it is more effective. Has your board any ideas?---It has discussed that and asked local authorities if they could be removed. That question has been discussed with the publicity people and there is a divergence of opinion. One is that we have founded it on a standard sign and

that leaving it up all the winter tends to add to its value. It is a trend in advertising and they take one theme and stick to it. It is a line they pursue in advertising.

Some hold the opinion which you mentioned; and some go the other way and say that there is no advantage in taking them up, because these signs are rarely read as the people speed past, although they are familiar with them. It was the intention to cut down the wordage in them.

Speaking of prohibited times, you say that considerable pressure has been brought at various times on the advisory committee and the Bush Fires Board for a variation of the dates normally fixed in the prohibited burning times. Has that pressure come from individuals, from senior authorities, or from other departments?---We will not accept it from individuals. It must come from local authorities, or groups of local authorities, or from some influential organisation. Even so, the board requires them to submit their request through local authorities or the Road Board Association, because many of those requests impinge on adjoining districts or would have considerable effect on those adjoining districts. Whenever these things are submitted, our request to local authorities is to get the joint opinion or approval of the local authorities adjoining them.

Further, when speaking to prohibited times, you said that requests for concessions in the dates fixed for the prohibited times have been based on the development and organisation of bush fire brigades, and the provision of fire breaks and protective burning. Would those requests for concessions apply to a shortening of the prohibited period, and not to burning within that period?---Yes.

Are they ever agreed to?---There has been a continual change, for various reasons, in the boundaries. They are worked in zones. They have been changed every year. The board reviews the whole position each year. Sometimes, of course, an additional reason comes about where there is a brigade organisation which is tending to programme fires, and it wants a longer period to programme the fires in. That is one point brought forward.

Who declares the prohibited burning period?---The Governor.

I presume your board is the recommending authority?---Yes.

Is the restrictive burning period decided in the same way?---No, it is fixed by the Act, starting from the 1st October to the 31st May, with variations in the conditions permissible for two months at each end.

Referring to the emergency periods, on page 6 of your statement, you say that no fires of any type may be lit in this period except with the authority of an officer authorised by the Minister. Who is that officer, normally?---I am the only one at the moment, because the principle adopted has been not to authorise fires. I hold that authority in case there are some exceptions or reasons.

Have exceptions ever occurred in which you have permitted fires to be lit in the prohibited period?---There have been cases.

Could you give examples of the type of reasons you accept?---One concerned a programmed fire at Harvey, in which the people commenced burning several days before. I knew that if they stopped burning altogether there would be serious danger of the fire spreading.

The burning off was commenced before the prohibited season started?---It was. It had been programmed for some time.

I am talking about the emergency period. Do you know whether the emergency period came in after the fire had been lit?---Yes.

You say that the emergency bans have never been imposed, purely because there were dangerous fire hazards on a particular day, but only when it seemed there would be a worsening in the fire conditions, giving rise to extreme conditions. Does that mean when the meteorological bureau forecast a dangerous day, it has not always been turned into an emergency period?---No. It has been the policy of our board that emergencies should not be recommended. Burning is banned under our Act, if it is a day when a dangerous fire hazard is

forecast, but some local control is given. The principle used -- perhaps not made clear by me -- is that if bad weather is to continue for a number of days in a build-up, it is regarded as a different matter. If a dangerous fire hazard, with say 30 to 40 knots in the wind, is forecast, it would be regarded as possibly warranting a ban. When conditions look as if they may be fairly serious, an estimation of the situation from the weather reports is submitted to the Minister.

Through your board?---Yes.

What is the longest period which you can recall when an emergency ban was placed?---They are usually placed on an indeterminate basis. They are brought into force and then lifted. Some have gone on for eight to 10 days, where fires have occurred, but they have been relaxed in other parts of the State. They have only been retained for a longer period where there have been actual fires.

Do you think there might be any advantage in imposing them for a definite term, and then reimposing them if found necessary at the end of that term?---There probably is. This term has created considerable difficulty, and some confusion as to whether they were still in force or not.

On page 6 you referred to approved areas. Are any of the districts, in which a serious fire occurred this year, approved areas?---The Murray district is a recent approval. I would have to check on some of the others.

Do you know if the Margaret River-Augusta area would be an approved area?---It is, but I am not certain when I say that. I am not certain whether all of it is, or only part of it is. In some of these cases we have large boundaries, and parts of an area are only approved. I could not give all those from memory.

Are there many approved areas in the State?---71.

Could you let me know whether areas in which serious fires occurred were approved areas?---That information will be provided to you.

Under the heading of "Firebreaks" you said that the Bush Fires Act provides extensive power to local authorities to order firebreaks. When such authorities order a firebreak, is it usual for them to specify the type of firebreak?---Yes, within limits. For ease of description on a legal ruling, it complies with the Act if a general order is issued, provided it is clear where the firebreak is to be. It is normally phrased in the terms of a break free of inflammable material. How that is cleared is left to the discretion of the person concerned.

In other words, it is left to the persons' discretion very often as to whether he burns it or ploughs it in?---Yes. Burning is prohibited unless it is permitted under the Act.

We could supply you with specimen orders.

I was just interested in the fact that so far as I am aware your Bush Fires Act does not define what a firebreak is?---No.

It does not give a definition. Therefore it would be necessary for anyone issuing an order to specify the type of firebreak or it would not have much legal value?---Yes. They have been contested in the courts and most of them have held.

You say on page 7, the first paragraph,---

> The Board has also made the wardens available to carry out, with the local officers, inspections in individual districts to assist and to take responsibility for determining standards of firebreaks and deciding those property owners whom they consider should be prosecuted. It just accepts the responsibility of determining those who should be prosecuted which is frequently an unpopular local decision. The Board will not accept the responsibility of prosecuting for breaches of a local order.

?---That is Bush Fires Board.

I do not know what you mean. Even in this case where you take the responsibility of determining those who should be prosecuted, does the board take responsibility of prosecuting them?---Perhaps I should make the whole matter clear. If we are looking at an approved area or district, the wardens carry out annual and three or four other inspections a year to look at the protection in a district as a whole. This is referring more to the individual. The wardens might be satisfied that the district as a whole has 90 per cent protection from firebreaks. In other words, that is a district protection and they consider that that is sufficient, but some individuals may not have done anything. This regarded as not a normal duty of the wardens. The wardens are made available especially to help the local authority. Perhaps we should not have used the word “prosecuted”. Sometimes it means pressure. They generally recommend that a case should be followed up because there is not sufficient protection on his property and thereby he is breaking down the whole system. If a road board or local authority lets one or half-a-dozen people get away with no breaks, then next year it will be up

around the ten and will increase each year, if they feel they can get away with it and are not being caught. This was done to assist them where they felt that some were only technical offenders, for instance. Some road boards have the idea that if they prosecute one person they must prosecute everyone, whether they are only technical offenders. We take that responsibility. They can say, "Well, we prosecuted, but on the advice of the Bush Fires Board."

You simply advise?---Yes.

Are there any cases where you do prosecute?---No, not in relation to firebreaks because we have never ordered them up to this stage in our own right.

In the next paragraph, under "Fire-Fighting Equipment", you say that the question could arise as to whether reliance could be placed on privately-owned equipment. Have you any record of the quantity and quality of privately-owned equipment or even of fire-break equipment of the different districts?---There has been at various times in particular areas a census made. In regard to an area approved in 1950, we would perhaps not have kept that list right up to date. Provided the warden is satisfied that there is ample equipment in his inspection of the district -- on which he usually spends three or four days and visits a lot of officers -- it is accepted. Going back to the original declaration of an approved area, plus the wardens' reports, generally we are given a fair idea of how much equipment is available. Some districts run from 200 to 250 equipped vehicles.

Near the bottom of that paragraph you say that "certain deficiencies also occur in some of the outer metropolitan districts, where such district problems as absentee ownership of land, residents working outside the district, etc., create difficulties in organising brigades and obtaining the necessary finance to purchase brigade equipment." I am left with the impression that your board does not provide any finance to either local authorities or fire brigades for the purchase of equipment?---That is correct. This has caused a major problem to

our board because the districts further out than these metropolitan areas are affected if they have fires. Many of these local authorities are partly in and partly out of the metropolitan fire district, which is another difficulty of ours. The part outside the fire district still thinks it ought to get a brigade service but of course the brigades will not always go outside their area, but they do do so sometimes.

I was interested because a little further on you say, "Again in country adjoining the Darling Range escarpment the bulk of the fire-fighting equipment available is suitable for its purpose on the level country below the scarp, but greater capacity to carry water is necessary to fight fires along the escarpment itself." Now that escarpment you regard, I think, as a very important line of fire defence. If there is insufficient water available to meet the fire danger, does not the board feel any responsibility to use finance to ensure that those facilities are provided?---No, Sir. It is felt that they should be provided by the local authority. But I wanted to make this clear, because it may not have been put clearly before: What is meant is not that there is a shortage of water but there is a shortage of suitable equipment to carry the water. That is the way it should have been phrased. In that escarpment country, of course, quite often four-wheel drive vehicles are necessary. There is plenty of water and carriers but they cannot get into the areas.

That is exactly what I have in mind. You have an area of country which is not densely inhabited and is not, I should say, wealthy, and the people may have difficulty in providing the equipment necessary for protection. I draw the impression from what you have said that it is the feeling of the board that those people on the flat country should subscribe towards the equipment necessary to meet that position?---Well, it would serve them as well. We do look on that type of equipment as essential in almost all districts. The board's feeling

there is that the local authority is the best body, and I think I could say this: It has been the feeling throughout the organisation here that they have always looked on Government finance as coming out of their own pockets, anyway.

You then refer to the suggestion made by some people that there should be a special authority set up to deal with that escarpment but that neither the board nor the local authorities are in favour of it. I presume the board's attitude is that basically you try to throw the responsibility for defence from fire on the local inhabitants who are represented by the local authorities, and that in a case such as this those local authorities should co-operate one with another, so that they do, in effect, form a fighting force along the escarpment; and that there should be no difficulty in achieving such co-operation, and that there should be no difficulty in achieving the co-operation of those people on top of the escarpment who may be the Forestry Department or someone else. Is there any difficulty experienced in that direction?---Actually, I do not think that there has been sufficient co-ordination on those lines. We are looking at this rather generally because Chittering is rather self-contained and Kalamunda has good equipment. We are referring to the Darling Range straight out from Perth here.

A.H. SUTHERLAND,
9/5/61.



Ed/Bly

It is only going down further South. There has been a modicum of contact between the officers; but this is the first time they have had a fire affecting all of them, I think.

Looking into the future, do you think that the difficulty of co-operation should be reduced?---Very considerably, because they are aware of the deficiencies which occurred.

Do you think there is any action possible or necessary that should be taken to ensure that co-operation?---This has already, to an extent, been followed up by our attendance at the various district meetings - trying to strike while the opportunity is there; and I am quite certain that they well realise the deficiencies which occurred in these individual difficulties. As far as I can see, they did not really have very much difficulty in co-ordination, because the control officers on either side of the line knew one another. It may have broken down in a few cases, but there was contact. They were virtually helping one another, perhaps having to go to their own district after having assisted in another one.

That is contact during the fire. I was thinking more of co-operation in planning before the fire comes along. That, I think, would need a body such as yours to assist towards that co-operation and co-ordination?---We think we can get it from concentrating on it through the wardens. We have tried these new angles many times in the past, but unless local people can see a definite goal it is difficult to make progress.

As far as the board is concerned, do you consider it is adequately staffed to deal with the situation generally?---Normally we have been able to meet all requirements. In these recent fires we were a little hampered in as much that I was averse to using inexperienced wardens. But in a normal set-up I think we could provide sufficient relief, if you re referring to when a fire is actually on.

No, I was not. I was thinking again of planning this co-ordination before the fires come along. Do your wardens live in their respective districts?---Yes. They are rather far flung, but the nature of the way in which they work I think that the re-organisation we had for the last season - it takes time, but there is a limit to the speed at which we can proceed - a limit set by local acceptance. We found it valueless for a warden to revisit a district if there was little he could do. At the moment he follows up very strongly any brigade or local meeting, and if he cannot attend it we cover it from Perth. That is our normal way of operating: Mr. Hale fills in, and so do I.

To put it shortly, do you feel that your difficulty at the moment is largely due to the fact that there has not been time for the wardens to settle down into their place and become thoroughly acquainted with the whole situation rather than shortage of staff?---That is so; except that where these major problems exist we have experienced wardens backed by Mr. Hale, or we send an experienced warden.

Dealing with finance, on page 8 you say that the decisions arrived at which have been consistent over a period of some 20 years are that any general scheme of subsidy would be most undesirable under the conditions which had developed in this State. The form of subsidy you are thinking of: Has that been considered from the various aspects through which it might be implemented? There is the possibility that your board might decide to make subsidies direct to various fire brigades; or it could be done through the local authority. Has it been looked at; have local authorities any objection to subsidies being made through themselves?---I think that the majority of local authorities are opposed to it, on the basis that most of them are satisfied with their equipment and they feel at this stage it would be unfair to subsidise. They would have to contribute to districts that have not done as much as they have. It has been considered from very

many angles - I think the first occasion I know of was back in 1940 - and it has been a regular item brought up at the Advisory Committee and the Bush Fires Board. Also, I think it is a matter I should not touch on. I think it has been dealt with by various bodies of local authorities on quite a number of occasions. In connection with staff, I do not want to leave any misapprehension. We feel we have had sufficient changes in the staff and we cannot proceed any faster. I do not want to leave you with the impression that we could not do with another warden sooner or later, but our ability to handle new ones is somewhat limited.

Yes. I am concerned by this objection to any scheme of subsidy. I do not wish to express the opinion that I am in favour of subsidies. The main consideration must be the effectiveness of the fire brigade, and if a local authority is unable to provide a fire brigade with the equipment necessary to do its job effectively then, I should think, you would have good reasons, and better reasons, than the fact that they might have to contribute to some other districts who were in poorer circumstances for not helping them?---That has been considered by the board. As far as they were concerned they did not know any local authorities which could not reach their requirements. If there were any, they were handled on the basis that a complete investigation was required of that local authority. It may be the fact that the reason it cannot finance it is because its rates are below all the others, and we have thought it was outside our scope and would have to be dealt with by the Government or the Treasury. - if it were an individual case which could not meet requirements.

Has the board ever sought evidence from the other States of Australia as to what their practice is with regard to subsidising fire brigades; and, if so, has the result been such that they think it inadvisable?---I myself

have been in the Eastern States. The chairman has, and some of the members have, on various occasions sought information on the lines you indicate. Information has been available to the board and to the members themselves. I have put up reports on the position in South Australia, Victoria and New South Wales, at various times.

The attitude adopted by the board is in the light of what it has seen?---Some local authorities have spent a fair amount of money - and that has been one of our concerns; that where they have done so there has been a tendency in some of those local authorities to tie up their equipment fairly rigidly, to stop them being called to what they regard as comparatively minor fires, for which they were not intended to be dealt with. The local authority I am thinking of would probably be able to produce somewhere in the vicinity of 90 to 100 equipped vehicles among brigades. They have only three central units or tenders. Although they have a large part to play, they prefer to see 90 maintained than full reliance placed on three. The three may be well set up, but three against 90 is a considerable difference.

It is a fact that that was falling off very considerably in these small farmer units.

The standard of maintenance was falling off?---Yes, and their availability. They were tending to ring for the central units. In most of these districts now, the principal units cannot be sent for except by certain authorised officers. By the way, they exist in the big bulk of our local districts provided by the local authorities.

A little later you say that there have been pressures at times for contributions from insurance companies. Do the insurance companies contribute at all to the bush fire organisations or brigades in any form?---No; only through that approved area scheme in which a fairly substantial amount is involved. Many brigades adopt this attitude: This is an approved area. You get so much concession. You should hand it over to the brigade.

In dealing with the approved area, I think you said your board at one time had a fear that it might result in higher premiums. Has that fear been realised?---That would be a difficult matter; I cannot advise you on it. On the whole I do not think the premiums have been increased to the extent we thought they may be. That is probably because other factors have come into it, and they have been able to maintain the rating. However, this State is zoned as far as some insurance risks are concerned. It is very difficult for a layman to give you the picture.

That is, fire risk?---Yes.

Is it practicable for a man living in the country to insure any of his property? Can he insure his grass and his fences against loss by fire?---Grass can be insured but it is not generally done. Fences can be insured.

When government organisations are considering compensation for damage, do they take into account the fact that a man has had his property insured, or has not had it insured, and pay him more if he has not had it

insured?---There have been some anomalies; that is all I know. Some who have been insured have complained to me that they got less than those who were uninsured.

On page 9 in the last few lines of the third paragraph you say that as recently as April, a motion advocating Government assistance to provide fire-fighting equipment was strongly opposed, and the motion was lost by a considerable margin. Are you in a position to let me have a copy of that motion?---Yes; although I would prefer it to come from the Road Board Association. I think Mr. Purse could produce it. It was a meeting of one of the wards of the Road Board Association. I have a copy of it.

You realise that a motion is very often lost or won according to the way it is worded, and I would be informed much better if I saw the actual wording. Under the heading "Bush Fire Brigade Expenses" you say that in the Bush Fires Act of 1937, provision was made that in certain circumstances a Bush Fire Brigade could claim expenses from the occupier of a property on which the fire occurred. Is that quite the wording; that you mean on which the fire occurred, because a fire could jump half a mile and land on a property and would occur there?---They could still claim expenses although it is unlikely. It was on any property on which the fire occurred and the brigade attended and in respect of which costs of suppression were involved.

Not one which got out of hand and escaped?---Not necessarily. The first clause we were speaking of worked, but when we came to putting up proposals to re-insert it in the Act we found there were quite a few legal loopholes in it which had never been found. In trying to tidy it up, it became quite complicated. The only practical way to do it is to create a liability on the occupier of any property on which there is a fire. You have to create the liability and then you leave it to the brigade to take it further; to decide whether they will raise a

charge or not. Why the brigades like this is that in many districts there is a working arrangement regarding fires; i.e., they do not have fires on Saturdays quite irrespective of our Act, because it is their cricket day or sport day; or perhaps they do not like fires on Fridays. Occasionally you find an odd person who does not conform to local practice, and they feel this is one way of bringing them into line without prosecution.

In this you mean a fire that has occurred during the prohibited or restricted period; a fire that has been deliberately lit under restricted conditions. He would not be liable to any penalty if the brigade turned out?---Yes.

They might turn out without it being necessary?---That is the situation. The brigades are volunteers and live in the area, and are more inclined to be that way than severe. It was considered that the brigade itself should not raise the expense, but that the local authority had to do it at the request of the brigade. We thought it was a double check and that it would not be abused. It had existed in the Act for years and had not caused any trouble.

Why was it opened in the House on the last occasion?---On the ground that it interfered with the volunteer angle of the brigades; and, of course, in the belief that it was more or less covered in the provision regarding prosecutions. It was re-inserted and exists there still. That is how it came to be deleted from the Act. There was a feeling at the time that it was covered under that provision and was just put somewhere else, but in doing that it linked it with the prosecution, but that is not what they wanted.

If you have a prosecution, you have to bring another case to cover your costs?---No; it can be done at the same time or later. But it is normally done at the time the case is heard. The road board submits that it was involved and desires to recover costs. Normally the case is taken to the local authority and

they make that submission after the case is heard.

Under the heading "Bush Fire Control Officers" you say there are 1,548 registered bush fire control officers. They are all within road boards, I take it?---Yes.

How many road boards are involved in that?---Around about 100.

So that leaves 15, on an average, to each road board?---Some are in the Murchison and the pastoral areas, and they have control officers only in some years. And there is a duality: some captains and brigade officers are also appointed control officers.

They would be included in both figures?---Yes.

Would it not be reasonable to make all captains of brigades, control officers?---We have advocated that. Circulars have been sent to the local authorities, but it is a matter in their discretion. Some are opposed to it. They tend to adopt the system with which they have grown up, I think. Apart from advising them and pointing out the advantages of these things, we have no jurisdiction in any way.

The board has no jurisdiction as far as the appointment of control officers goes?---No. It does tie up the registration and confirms the legal basis, but it actually cannot refuse to register.

Under the heading "Bush Fire Brigade Organisation" you say that the Bush Fires Board is opposed in principle to very large and extensive brigade organisations, and you give the reasons by saying that there has been a tendency for them to split into factions and to have domestic trouble.

From the practical point of view, does the board see any advantage in that? If you have a large brigade organisation then they have control of the fire, and their lines of communication remain under the one control for a much longer period than would be the case if you had to switch over to a number of independent brigades?---We have had trouble in all our large brigades. One had 55 lieutenants each with a separate section, and they broke up into factions. A large part of them got out of touch with their local authorities and we are only just beginning to get them sorted out. A small group would work better and they could be co-ordinated with the chief control officer or through advisory committees. They apply in the more intensely formed and broken up districts rather than in the wheatbelt areas

You mentioned that the board considers that the system of fire control officers gives less protection than the system of fire brigades. Could you explain how that comes about?---There is no provision for a deputy or anyone to relieve a fire control officer. He must be appointed and registered before he can act or exercise any authority under the Bush Fires Act. With the brigades, it is a hierarchy that goes down and even a member of the brigade has authority to act until the officer arrives. There is also the second point of insurance. They are not covered in any way, unless they are acting under authority, and there must be somebody in charge with authority under the Bush Fires Act. Normally, some firefighters arrive before the actual officers get there, and that means they are unprotected. If they belong to a brigade and are brigade members, any action they take is authorised by the Bush Fires Act.

On page 11 you describe a district which is an exception to that desirable state you have just mentioned. Was that district involved in the recent fires?---Yes.

Could you tell me which one it is?---It was the Serpentine-Jarrahdale district. In some cases, we have had difficulties where that organisation existed, from the point of view that they have not an organised group.

They have overcome that to some extent, but in other districts where we have not been able to get brigades we have had difficulty in getting efficiency.

The fact remains that the workers under the fire control officers are not insured?---They are insured if the fire control officer is present at the fire, but if he is not there they are not protected.

To turn to the question of advisory committees: These advisory committees are not provided in any legislation?---No.

It is something your board has developed?---Partly, and partly they have developed themselves. Some local authorities set them up as a committee of the local authority, because they have difficulty sometimes in giving the amount of time necessary. Under their local authority Act they have the power to set up committees. They then started co-opting the various senior officers of that committee, which led to this Advisory Committee.

Does the board favour this committee?---In some districts, yes. It is where we have not been able to get co-ordination in districts.

Under the heading of "State Emergency Services" you refer to service set up to cope with civil disasters. Is that service a continuous set-up or only when an emergency arises?---It has been set up and handled through the Premier's Office and has arisen out of civil defence. To bring it into force an approach must be made to the Commissioner of Police, and if he has time he consults with the Under Secretary of the Premier's Department. The request must go through the Commissioner of Police. He's the co-ordinator of a network which exists throughout the State. In practice where fires are concerned they have not tended to go to the local policeman because the local authority has approached us direct -- and that is how we have been brought in -- and then we have operated through the emergency set up in providing our contacts.

Sitting suspended for lunch.

BY THE COMMISSIONER: You were dealing with the State Emergency Service and you explained that it came into operation upon a call to the Commissioner of Police?---Yes. You make a call to him through his department. That was the way it was intended to work.

You mentioned somewhere that Mr. Lonnie was part of the State Emergency Service. What function does he play?---I can only give you the original conception of this matter. He is the Deputy Director of Civil Service, and the State Emergency Service arose out of that organisation. I understand since that for emergencies, other than fires, he has been appointed an executive officer of the State Emergency Service, but I have no knowledge of the change which took place.

I have seen reports in which it was stated the State Emergency Service took part in some of the recent fires, apparently in providing supplies?---That is so.

You said in one of your reports that the request did not come through the board, so it must have been a direct request to somebody, that is the Commissioner of Police?---That is right. I do not know whether it was as a result of the recent emergencies when Mr. Lonnie has been given his title. I have not seen the title of Executive Officer of the State Emergency Service before; I think it is a fresh appointment. That arose more from the floods in our North in which emergency he did a lot of organisation.

If this Commission wishes to ascertain the part played by the State Emergency Service in the recent fires, and the part it will play in future fires, whom do you suggest we should call upon?---Mr. Lonnie would give the main background. I did explain that it was intended the Commissioner should consult the Premier's Office, and Mr. Lonnie is an officer in that department.

You say that under the Bush Fires Act, the Minister for Lands has power to declare an emergency period and then to appoint an officer to take charge of the firefighting operations. Has the Minister yet appointed an

officer to take charge of the fire-fighting operations under that provision?---I was not personally concerned with it. I understand that was done in the case of the Gidgegannup fire.

So the board does not know who was the person appointed?---Mr. Hale can give you more information about the recent appointment. It was virtually an officer of the Forest Department from Mundaring, plus Mr. Hale. Our other warden joined him and I arrived later. It was more or less a joint effort, and it was more to organise outside assistance.

That would be somewhat similar to what you would expect the State Emergency Service to do?---Yes. I would elaborate in the case of Mandurah. I do not know on what Mr. Lonnie acted, or whether there was a direct call from Mandurah. The only thing is that we know he did contact our office which supplied information on the report we had from Mandurah and on what we had done. We had organised what they had asked for.

Under the heading of major fires, you say there is no requirement for a local authority to advise the board immediately of any fire, even if the outbreak is attaining major proportions. I suppose most of them would realise that you are available if they need help?---That is so. This is a defect we have run into. All that the local authorities are required to do is to give us a report once a year. On occasions there have been outbreaks of fires which we did not pick up until some time afterwards, when they notified us.

You would like it to be made statutory that they inform you immediately?---Not necessarily. We do not want to be advised every time there is a fire outbreak. It is difficult to determine where the line should be drawn.

You have no suggestions of what should be done?---This needs a good deal of consideration. Advice does normally come to us if they are in trouble.

Would you at present send an officer to a fire which had not been reported to you or in regard to which a request had not been made to you?---Possibly, according to the circumstances. Chittering was a case in point. We knew of the fire and what was going on but Mr. Hale went there purely in case it developed into a worse state in order that I might have a direct contract and an independent assessment of what was going on.

You do not stand on your dignity because you have not been asked?---Oh, no!

On page 12, in the last paragraph under the heading, "major fires" you say --

> It is considered the State emergency service is an extremely valuable organisation, and it was of very great assistance in recent fires. However, in dealing with fire, it is considered that requests should be channelled in the first instance through the Bush Fires Board and that emergencies should not be declared or overall controllers appointed without reference to the Bush Fires Board.

When you say, "in the first instance" do you mean that once contact has been made through your board you do not require that it continue through your board?---As far as emergencies are concerned - excluding Augusta-Margaret River with which we had little to do while the fires were on - normally we work within our own organisation only calling on the Commissioner of Police for what we are unable to provide. I kept the Commissioner informed from the outset in relation to the Keysbrook fire because I felt he might be drawn into it; but in the main we have been able to handle matters ourselves. It is worked on that basis. I make a call to the Commissioner who asks me what I want. I might say to him that we may need the services of the army or a plane from the air force. He says, "make the arrangements and I will authorise them."

That is a point I do not follow. Why is the Commissioner of Police expected to authorise any arrangements you make for additional assistance, and how far does that go? For instance, if you want additional

equipment do you go to him?---No, not if it is from our own brigades, but if army equipment is required we must do so. That is the arrangement. It must be teed up through the Commissioner if the services of other departments are required. We do not have to go to the Commissioner for anything under our own control although a few times I kept him in the picture because I thought he might have another demand and go to the same source. In other words, I thought he ought to know what was going on.

This arrangement is between the board and the Commissioner of Police, is it, and not directed by Cabinet or the Government?---It is mainly based on the emergency service which was really that it should go through the local police officer to the Commissioner. I think the Commissioner prefers it to go through us because we can usually give him some background.

Under the heading of "communications" you refer to the need for radio equipment and the difficulty that local authorities have in providing this equipment or, if they do provide it, the difficulty they have in maintaining it in the condition it needs to be maintained. You say, "the Bush Fires Board had decided that it will approach the Government for finance to obtain its own emergency network." Can you give me some idea of what the board visualises in this connection? For instance, how many sets would it require?---It had been left for a later decision of the board on that point to which I was supposed to make recommendations. However, what I personally had in mind was some 10 or 12 sets. In the past we have borrowed sets from various sources in Perth and at one stage we had a number of sets available for demonstration purposes through one of the firms in Perth. When an emergency occurred we did use those. On the basis we had in mind we raced them down to the district. However, there are several districts quite well set up. I am not saying that we necessarily subscribe fully to the view of the local authorities that they will not be looked after. To an extent that may be, but that can

be overcome. The districts that are operating are keen enough. They find other uses for them apart from major fires. They are useful for ordinary burning off operations.

What sort of sets did you have in mind? Walkie-Talkie sets?---No. The vehicle type of set. We have found that it is more valuable than the walkie-talkie sets where you work through an operator. The control officer has no direct communication, and this is desirable. That is the method we have operated on where we have put them in. The army's sets have been rather on the walkie-talkie style and that is my objection. They do not get the range which the vehicle sets get and the control officers have to go through several bodies to get messages through and they do not have the advantage of hearing everything that is going on even if they are not sending messages. We found that it was of great value in the networks to be able to hear all that was going on. They knew what the other control officers were doing.

Have you any idea what the set-up you visualise would cost?---Very roughly I would say about £2,000 to £2,500. I must explain here that we are limited in the sets we can get on a commercial basis.

There is really only one firm fully set up to give maintenance. It has been one of our difficulties. There may be another firm set up at the moment, but one particular make of set has had, to my knowledge, six agents, and it may be seven, and at the present time I do not think they are effectively represented, at least from a maintenance point of view.

You would not require to appoint an officer of your own who would have to deal with this business solely?---No. Three of our officers are ex-Army operators and we find that is sufficient. What I had in mind with this emergency service is that the firm I was mentioning has an extensive set-up in this State because they control practically all the taxi mobile sets and they are willing to provide us, and have done, free of cost in this type of emergency in the past -- a technician immediately to come out with us; and that is what I had in mind, that if we required it we could pick up a technician day or night.

How do you get on for frequency; do you adopt the same as the Forests Department?---No. The State was zoned some years ago to avoid the trouble they had in the East. We have five frequencies, with permission to apply for an overrider. I think we have an inter-district frequency, but we have five zones with frequencies covering the State.

And do local authorities in the different districts have no difficulty in receiving each other's messages?---They should have none; but it is not developed to that stage at the moment. That is one reason why this emergency worked the way it did. The procedure might be ragged, but there was no interference. There are now two local authorities involved side by side, but on different frequencies.

Have they an overriding frequency?---Yes.

How do you get on with the Forests Department?---The Forests Department would agree, I think, that it could be linked; but they have quite a number of frequencies some of which are for night and use the best

frequency for their overall linkage. The set-up we have in mind would only have five channels. It would have to be gone into as to what frequencies they covered. We could cover our own and the overrider, with two more probably.

You say that Police communications are unsuitable for fire conditions due to the frequency with which they operate?---Very high frequency is the one we were talking about: they have Police control cars and some walkie-talkies, and in our experience on the fire front the range cuts down considerably. At Keysbrook they only got half a mile with their walkie-talkies.

You say that the Army did an excellent job in the Keysbrook centre of the Dwellingup fires, but were not of great assistance at Gidgegannup?---That is so. They were perhaps more open at Keysbrook -- working in the more open parts of the foothills. The trouble with the Army at Gidgegannup was the inherent trouble of relying on them. I think their best equipment was out on exercises. They only get about three or four messages through to us and then they abandoned it because they could not get the messages through.

When you speak of the radio network from private sources, is that the one you referred to a moment ago as a demonstration outfit?---Yes. Some were walkie-talkies and some vehicle sets, and they had a couple of sets of their own installed. We were able to put those sets on the same frequency.

Were the same people responsible for the radio set-up in the Wagin district?---Yes; we had to make do with what we could get.

You speak of backgrounding of firebreaks. You say that the general view is that in almost all cases the country would have been burned by the main fire in any case. I am interested in what you mean by "the general view". My personal experience has been that whether a backfire is successful is dependent on whether you lit

the fire. When you say "the general view" do you mean that over here in Western Australia people generally are satisfied that backfiring is very well done and only country is burned that would otherwise be burned in the main fire?---Those are the views that we have from the country. That is normally the way it has been looked at. There have been worries at times where property was damaged. The main outlook I have heard expressed at all meetings was that the areas would have been burned, that it was inevitable. There have been very, very few cases where they have not linked.

The Chittering fire: You say that it became subject coronial inquiry. Has that finished?---I don't think it has started.

You say it has been agreed to have a coronial inquiry?---There was a request by a private individual. I don't know whether a coronial inquiry is bound up with Police inquiries which were completed some considerable time ago, and I don't know what the hold-up has been.

You say that on the 21st of December the Forests Department advised the Bush Fires Board that a fire was burning in the western part of the Toodyay road district. Is that normal practice, for the Forests Department to notify you when they have a fire?---No. This was a fire out of their area. They had spotted it and thought that something should be done about it. I think they had several reports over several days about it and knowing that country they probably thought something should be done about it locally. I must admit to some confusion here. I think it was given me to be just inside the Avon Valley training area and I did not associate it at that time with the Chittering fire. I thought it was a separate fire report, whereas I think it was all bound up with the same thing. That is still open to doubt. I couldn't be certain about it.

It is not important. You say you were subsequently advised that the fire was in very rugged country to which access was extremely difficult, if not impossible. By that you mean difficult for wheeled vehicles?---Yes, from Toodyay. There is no settlement in the immediate vicinity of it. It is an Army training area, and some Crown land to the north. Their officers have been out there, as they said, on wild goose chases on a number of occasions and they did not feel they should go to a lot of trouble. What I didn't realise then was that some of it at least was accessible from Chittering.

Some of it wasn't accessible?---Was accessible from Chittering, apparently; but that is being wise after the event. I would like, on behalf of Toodyay, to say they did give a hand with the Chittering fire. They looked at it more or less as I did, that it was a separate fire in their own area which they couldn't get to. That view was only in respect to Toodyay, that they would have to wait until it got closer to them so that they could deal with it.

You say that the fire was not, at that stage, a threat to property and the only practical action the Toodyay people considered was to keep the fire under observation, with a view to taking further action if it spread to more accessible country. In the next paragraph you say that local groups fought various phases of the fire for periods up to the 24th of December?---That is what I tried to explain: I was looking at this from the Toodyay end, and I knew that at that time Chittering was having a fire, and I did not link the two.

How does the board regard the attitude of waiting for a fire to come to you rather than going to the fire, even under those circumstances?

?---These people are volunteers, and I reported the fire as being in their area. It was reported back to me as not being a threat to any property in the Toodyay district at that time. It is very difficult country.

But in general the board's attitude would be that every endeavour should be made to put out a fire at any time?---Yes definitely. We have to accept the difficulties as they are.

You say that the possibility of obtaining assistance from the Army was discussed but he …?---That is the control officer.

But he was informed that this could not be regarded as an emergency, and so you would not request Army assistance?---That is so.

I would have thought the Army would regard bush fire fighting as very good training for their troops; but perhaps the troops in that area are experts in certain directions. I do not know anything about the camp?---It is not troops in the area. That training camp is quite a headache to us. It is used by various Army groups, but is not a permanent installation. One of the reasons the Army went there was because the local control officers complained bitterly about some ammunition dumps they knew nothing about, going up. They were unauthorised dumps we discovered. The only permanent Army troops available for this purpose, to any extent, is the special air services section. It is the one Army group, really, that is a standing body here. They may train on that Avon training centre, or they may not. It is not their headquarters. The objection to the Army there -- this was made very clear to me -- was that the fire was under control. All they wanted was patrol. We have great difficulty in making the Army appreciate that once the main firefighting is over it is just as important to make sure it is kept there. They usually want to leave the scene as soon as the major fighting is over. They do not look on patrol as one of their functions. The same applies to the Air Force. They feel that should be a matter of local arrangement. Had we asked them, I know from past experience they probably would have

refused; except perhaps they had some involvement with this Avon training centre.

If you did request Army assistance, where does it normally have to come from?---Through the Commissioner of Police.

Does the army have to come from Perth?---Their normal station is at Swanbourne near the coast in the metropolitan area. But the S.A.S. move about considerably. They go up north to do exercises. They work a lot with the Air Force; they are parachute people.

Would they not regard the opportunity of getting fire fighting experience as something to be desired?---Within limits. They say their main role is that of defence, and they spend a lot of time on exercises. We have found that if they are in camp down here it is usually as a type of rest period in between, and they do not like their programme being unduly or unnecessarily upset.

This general attitude you speak of is something which you have gathered from odds and ends that have happened?---Yes.

They have never definitely told you they would not go to a fire if you have requested their assistance?---At Gidgegannup we had already had some Army assistance with the signals and firefighters' equipment. They were on manoeuvres and asked permission to leave when their signals were not getting through. The following morning I contacted, direct, Colonel Williamson and he said they could not be looked on as a continual source of firefighters. Unless there was an absolute emergency, he did not think they should be brought into it.

You say that at the request of the control officer the Forests Department was advised of the situation and that local brigades had asked whether the department could assist; and that on the 25th December they made a power saw available and also some water. The inference I draw from that is that they were not very helpful. What do you mean by "and also some water"?---Christmas Eve was a holiday - a Saturday. When they took the

power saw, it was Christmas Day and they were not involved; or their areas were not involved. And you may gather from this that I did not expect the Forests Department to assist. At this stage I had information I was not positive of, that there were brigades in the Swan District that had not been called, and I really did not expect the Forests Department -- they had had a man out there to look at it, and I did not expect them to come out and take over the full patrol of the fire.

You did not press them to the extent of saying that they failed to meet your request?---No. One of the officers of the department would confirm this: I understand the water was drinking water at a static installation of theirs in the area -- 1,000 gallons of drinking water. This is inaccessible country and 1,000 gallons in that area was a big help to the brigades.

They conveyed it to the fire front?---It was fairly close to it.

You say, after it is all over, that the Bush Fires Board considers that the Chittering district could be better organised and that more could be done by the local authority in fire prevention and control. Would you give me a general idea of how they could improve things?---It is a district where we have had a problem for many years in getting a brigade organisation. They are now considering the purchase of a central tender, but they have no road board equipment suitable for fire fighting; plus the fact that they have not, up to the present, done a great deal in the way of ensuring fire breaks; plus the fact that the brigades in this Chittering area existed rather in the officers rather than an organised body. There is a registered brigade with a captain and lieutenants and control officers in the area, but there has not been very much effort to form them as brigades that have meetings and let the local people in. I do not say the attempt has not been made.

Then you go on to say, that the bush fires board was also concerned that many residents left their properties in this area for seasonal holidays, although they must have been aware that the fire was burning in the vicinity. Do you find that the fire control officers ever disappear from their districts during the fire season when there is a danger about? And if they do, whether arrangements are made for deputies to be appointed in their place?---Yes. There are usually ample in most districts to cover the position; but at times it is something that we are concerned with. On occasions the district may be a little weak from lack of planning. Some districts plan extensively for this. They have rosters for going to fires out of their area, and that type of thing, and ensure that there is always sufficient control in their own area.

Your board, through its officers, would be continually representing to the road boards, before the fire season, that they should do planning of that sort?---Yes; and as far as possible we do cover as many brigade meetings, individually, as we can; and they do have meetings apart from the local authority. We try to attend those as far as possible. It might be said that we attend most of them that we are invited to.

At the moment I have the impression that you have no lack of men who are prepared to belong to fire brigades and be fire controllers, and so on, but that there is a certain absence of co-operation between districts, and even within districts; and again a certain lack of planning before the fire season comes on at all. Am I correct in that?---In some areas, yes.

That is not general. I have drawn attention to the point that in some districts where they have gone on under existing organisations there has been no trouble. It is difficult to get them to introduce something new.

Would you say that difficulty exists mainly in those areas where the fire danger is least?---No; it is not peculiar. Some of the areas which have a limited fire season are well organised. If you want them classified no doubt Mr Hale and I could give you the information on that.

I would like to see a classification?---They are somewhat arbitrary, but with the various concessions and suspensions given under the Act very often on a day's notice, we need to have a ready reference as to what the district is like. The better organised districts get more concessions than those we are concerned about.

Coming to the Dwellingup fire, I would like to know whether these reports are summaries by you of the reports put in by your own officers?---Yes, virtually, possibly with some additional information where I have been present or that has come from the board members. The reports I have submitted as exhibits are basic reports.

But the information you are supplying about fires can be classed as hearsay evidence; you did not know of it; you have got it from your own officers?---Yes.

With regard to the Dwellingup fire you say that "there was" considerable confusion with the western side regarding the progress of the fires. Many complaints were made that the Forests Department advised local officers inquiring for information that the fires were under control when this was obviously not so, and the fires were threatening settled areas. Would you know of any genuine cause for complaint by people on the western side with regard to the Forests Department?---Only from what they reported to me. We attended the meetings

about these fires and we had complaints direct to the office from control officers in several cases. It is more or less a general picture of what was given to us by those local officers.

You are not supporting the complaints; you are simply recording them?---Just recording them.

On page 15 in about the fourth line you say in connection with the Murray district "the main deficiency appears to have been that a chief fire control officer for the district had not been appointed by the local authority." In the Bush Fires Act I have not seen any reference to "chief fire control officer". How does that title come about?---He must be called something. You will find in the Act that the local authority shall describe the seniority of its officers, and the normal thing is to describe the first on the list as the chief officer. That does empower them virtually to appoint an officer from their district by making them the senior fire control officer.

But he has no statutory powers different from any other fire control officer?---Yes, perhaps in a roundabout way. But they are officers of the local authority and they are subject to direction by the local authority. So if they appoint a chief or senior officer they can make it so that the other officers are to come under his jurisdiction.

Is it by chance that this term, "chief fire control officer" has been adopted generally, or is it a suggestion by your board?---Some of them call them senior control officers, but most of them call them chief.

Is there any tendency to appoint a particular person such as the secretary of the road board as chief fire control officer?---In some cases because he is able to play an organisational role. He is the one person that can always be reached.

You say, "There has been a good deal of publicity given to criticism in this district regarding the back burning carried out by the brigades and control officers". It sounds as if somebody is not too happy about the back burning. What is the nature of the criticism?---This was dealt with by the meetings of the board the

minutes of which were provided to you -- at least copies were provided. There were only four properties involved which lost some pasture and fencing in the back burning operation which had not linked with the main fire. Consequently they maintained it was unnecessary. Without going into the rights and wrongs of it the board considered that the damage should be regarded as damage by the main fire for purposes of relief.

Was that recommendation accepted?---I cannot tell you so far as the Disaster Relief Committee is concerned. These minutes were submitted to the Minister and he deferred action on them pending your inquiry. It was passed on to the Disaster Relief Committee.

Further on page 15 you say that, "Extensive bull-dozed and graded firebreaks had been prepared in the area, but it was the general opinion of control and brigade officers that these breaks would have been quite inadequate and valueless to stop the fire under the conditions expected, particularly from the experience of the preceding days and nights." The strong easterly winds expected were, I presumed, forecast by the Meteorological Bureau. Did they not forecast a probable change in the weather to the extent of rain?---Yes, but not precisely. These people get direct forecasts, not the published ones. They had been modified later. But I think they had commenced back-burning at that stage. There was only the possibility of rain, but they still forecast the easterly winds.

It must have looked as if the weather was going to get cooler. Do not easterly winds bring cooler conditions?---No, easterly winds bring hot conditions. Easterly winds were their bugbear, particularly when they got to 40 or 50 knots per hour.

I see the position. They get these strong easterly winds each night?---They had done, but they were forecast, and although rain was mentioned it was only given on a very patchy basis to begin with.

A.H. SUTHERLAND,

Dealing with the Mandurah fire, in the last paragraph you said that they did not consider that an emergency had been necessary?---That should have been the Murray road district which was rather upset about this emergency. To detail that a little more, with a fire only two miles away and the wind of considerable strength, the information given to us was that the fire would reach the outskirts of the town in three quarters to one hour's time. The action taken by the board office, on my authority, was to communicate with the Kwinana oil refinery and also some districts not affected. We discovered in those districts they had fires of their own which were virtually under control, so they sent some assistance and were willing to send more if absolutely necessary. At that stage we were unable to contact anyone except a 16 year old girl at the Road Board office. We could not get the police at that stage. Mr Lonnie was informed. I do not know whether or not he acted on the report he received from our office in a fortuitous manner. He rang our office about something and was told about the situation. He made arrangements for an ambulance and a medical team to be sent. That was part of the set-up under the emergency plan. These arrangements were very valuable in the case of Gidgegannup in treating eye complaints. Whether or not it was necessary, my personal view is that there was no harm in making arrangements in a situation which could have been serious. Mandurah houses a lot of retired people. It is rather scattered and rather fire hazardous. We were concerned when we knew that fire threatened the town.

(The witness retired).

THOMAS SAMUEL CROUCH, Farmer, Burnside Donnelly Mail, Manjimup, sworn and examined:

BY THE COMMISSIONER: You have prepared a statement to present to the Commission. Would you read it?---Yes, it is as follows:-

More funds be made available by local authority or State Government to volunteer bush fire brigades to enable brigades to purchase fire fighting equipment. At the present time brigades have to buy their own equipment, apart from two knapsack sprays and two rakes supplied by local authorities. A lot of brigades are not in a position to raise sufficient capital to buy powered pumps and water tanks.

Money could be made available to volunteer brigades from revenue of local authorities, and matched on £ for £ basis by State Government or local authorities. Could strike a rate to raise the capital with brigades themselves contributing, say, 25 per cent. or 50 per cent. of cost of equipment. In cases where brigades have levied themselves to purchase equipment, it is much easier to collect levies from brigade members, if they know that money is also being made available by local roads boards.

I think that volunteer brigades are the key to localising outbreaks of fire and should receive more consideration and encouragement in carrying out a very important and self-imposed task.

A wireless pool to be created by bush fires board and held in Perth and strategic places readily accessible in case of major fires. The Forestry Department could, most probably, make available information as to what areas the wireless sets could be stationed outside of Perth.

By having Walkie-talkie type wireless sets posted around the fire, the control officers would get immediate information on progress and would be able to use his forces to the best advantage.

It would be too costly for brigades or local authorities to purchase and maintain sets in individual areas just on the chance that they may be used at some time. As it is national, as well as private assets, that would be receiving protection, the wireless sets ought to be provided by the Government.

More roadside burning ought to be carried out, but at the present time, many landholders are reluctant to burn roadsides in case of accidents caused by smoke reducing visibility and making persons doing the burning liable to damages, which could be heavy. If land holders could have more legal protection, more burning would be done along roadsides. As roadsides are potential starting places for

fires it would be advantageous to have all litter burnt as often as it will burn. Clean roadsides also constitute a good fire break.

Government should institute some form of insurance against bush fires and other calamities, to enable sufferers to get quick relief.

Fire prevention lectures be included in school curricula, say one or two lectures a year to the senior classes, to be given by bush fire wardens from the Bush Fires Board, or if standard manual on fire prevention is made available the lectures could be given by forestry officers, members from town volunteer fire brigades, or bush fire control officers.

Publicity on fire prevention should be given to all non-English speaking migrants. Pamphlets printed in various languages, or a few languages, say, Italian, Greek, German and French; these pamphlets to be given to migrants either at port of entry or at the township at which they are going to settle. As elder migrants take a fair time to be able to speak English it is unfair to expect them to be able to read and understand it within 12 months, part of which could be dangerous fire hazard. A lot of' migrants could be coming from countries where there is little or no fire danger and wou1d not realise what damage a fire can cause out here.

BY THE COMMISSIONER: You reside in the Manjimup district?---Yes.

Had you any experience in the recent fires?---Not this year.

Have you in the past?---Quite a bit previously.

Are you a fire control officer?---I am.

You would have had association with the bush fire brigades?---Yes I have a brigade under my control. I am the captain as well as the bush fire control officer.

In your statement you said that more funds should be made available by the local authorities or State Government to volunteer bush fire brigades to enable them to purchase more fire fighting equipment. You say that in the knowledge that local authorities might have to raise their rates, in order to obtain the necessary money?---That is so. Bush fire brigades are only issued, on application, with two knapsack sprays and two rakes. Using my own brigade as an example I have approximately 40 members. Two knapsack sprays do not go far. I cover a fair bit of country, roughly six miles by three miles.

There is quite an area of Crown land and reserves in that area and we find that knapsack sprays are not so good, so several years ago we struck a levy of 70s. on all members to buy a small fire fighting pump which has a maximum output of 4,000 gallons an hour with all pipes open. When we went around to collect this levy the people who were not at the meeting when the decision was made wanted to know what the road board was doing that they had to contribute. We had already approached the road board on this and the road board said that it had 37 brigades in the district and that if it made money available to us the other 36 would want some and it would not be able to raise all the money. When we approached the members for the ward in which our brigade is situated they said that the only way -- except the 3 per cent. fund which they will not touch -- is to strike a rate and that we were not going to be very popular if we did so because people want their rates to go down and not up. That is the reason I think money should be made ava1i1able somewhere to these brigades to perform their very good task.

If local authorities will not provide it, you have only one other source, and that is the State Government?---We have not approached the State Government.

You haven't?---No; but I imagine it would be in order for the local authorities to do so. It would be more in line if we approached the local authorities and they approached the Government.

You have not asked them to do so?---No, we have not specifically asked them to get the money from the State Government.

That is just an oversight I take it?---Yes. If we had thought of it we would have because we have considered numerous other channels.

What equipment has your brigade?---At present we have this small Rex fire fighting pump and a 200

gallon tank, six brigade knapsack sprays, and four rakes -- that is the Forestry type rake -- and all the members of the brigade have knapsack sprays of their own. About eight or 10 have those little power pumps or similar pumps which can be fitted to a tractor and pumped from a 44 gallon drum or container on the back of a tractor. These are pretty effective in grass fires or for going around in mopping up operations. The tractor can get around into country which is inaccessible to other vehicles.

If you are successful in persuading someone to provide more money, what do you think you would need in order to make your brigade reasonably efficient?---I think another power pump would not be out of the way; but there are other brigades which have no power equipment at all and it is with those in mind that I was seeking to get money made available from the local government or other sources.

By asking you what you have and what extra you desire I could gain some idea of what you consider are the full requirements?---I think another pump of a high powered nature would be desirable. Something of a 7 or 8 horsepower.

What about the water supply?---I think there are enough water supplies around with the creeks and practically everyone has a dam.

You are apparently rather keen on this idea of subsidising expenditure by the brigades rather than asking the Government to provide all the money?---In a way, yes, sir. If the brigades contribute a certain amount of money they look on the equipment as being owned by themselves. They have an interest in it and it will not receive as much abuse as if the Government holds it entirely; because if something belongs to the Government it receives no consideration at all.

Supposing you did get some assistance of that nature in the form of a subsidy, do you think there would

be any difficulty in arranging for the bush fire brigades to keep such equipment solely for fire fighting purposes? Do you think they would not use it for irrigation purposes or something of that kind?---I do not think there would be any trouble at all. I have one outfit at my place and I have had several requests for pumping tanks and things like that, but there is no difficulty in keeping it for the purpose for which it was intended. I know one brigade east of Manjimup has two fire fighting pumps and they have no difficulty in keeping them for fire fighting purposes only. It is handy to have them also for clearing fires or grass fires. Recently I helped to burn 40 acres and although the equipment was not used we took it there. That is the reason it was obtained.

You speak of a wireless pool to be created by the Bush Fires Board to be held in Perth and you refer to having walkie-talkie wireless sets posted around the fire. Have you any personal knowledge of the use of radio in bush fires?---I have never been involved in fires where such equipment has been used.

So if someone said that some other sort of wireless should be used other than a walkie-talkie you would not be able to comment?---I have had little to do with this in the Forests Department but I would not know what type would be preferable. The only reason I referred to a walkie-talkie set was that I believe a mobile set is desirable but I did not necessarily mean that specific type. The only type I have had experience with was during the war and they did not have a very good range and the terrain could upset their efficiency. But I think that fire brigades could work in liaison with the Forests Department with regard to wireless sets and frequencies. It is going to be an pretty costly item and could come after pumps and that type of thing.

You are thinking of something the Bush Fires Board could have in Perth so that when a fire of any significance was reported it could be moved holus-bolus to the site of such fire?---That is right, instead of having such equipment held by each brigade or local authority.

In the case you are putting forward, you say that national property as well as private interests would be protected and therefore some assistance should be given by the Government. What are the national assets which would be affected?---The State Forests. I come from Manjimup and the places surrounded by jarrah and karri and we do work in close co-operation with the Forests Department. As well as private property being protected, aid would be provided to prevent loss to State Forests.

Is it not a fact that at present the Forests Department has wireless sets which are being used to protect private property?---Yes, it works both ways.

You are not suggesting that you would be prepared to pay half the costs of the Forests Department's sets?---Well, we do.

That is right. I think you should certainly put your case to the Government?---We can use you as an advocate, Sir.

You say that more roadside burning ought to be carried out but that at the present time many landholders are reluctant to burn roadsides in case of accidents caused by smoke reducing visibility and making persons doing the burning liable to damages, which could be heavy. You therefore ask that more legal protection be given for landholders. That is not so that they can go in and cause accidents without any concern, is it?---No, Sir.

You really think this might be dangerous to people passing along the road?---It is at times. In the spring burning, when the undergrowth is heavy, a dense pall of smoke rises from a fairly small fire. You would need only a fairly small fire to block the road with smoke.

If legal measures were taken, would it not tend to make people careless with smoke and fire?---I think precautions would have to be taken. You could not just go and burn it. It would have to be done with fire brigades' consent, or a local fire officer's consent. But they would be liable if negligence could be proved against them. There might be a case where negligence could be proved but where it was entirely accidental. A lot of people travel through the country, and a lot of tourists throw cigarette butts all over the place. I know there are many farmers who would not burn between their boundary fence and the road because they are frightened of causing an accident and might be liable for damages.

I have come from a place where they do a lot of roadside burning, and it seems to me that the onus is on the motorist to exercise care, just as much as on the person who is doing the burning?---That is true. There is a lot done in the wheatbelt. The wheatbelt in the South-West is an entirely different proposition. In some areas it is grass, and it is gone in a short time. In others you get litter, leaves, and undergrowth, and this creates a dense smokescreen.

Have you ever known an accident to happen as a result of roadside burning?---No; but I have known a couple of near misses.

You say the Government should institute some form of insurance against bushfires and other calamities to enable sufferers to get quick relief?---Yes.

You mean the Government should institute a fund to which the landholder could subscribe in insurance, or that the Government should pay the premiums?---I think the Government should pay the premiums to cover national types of calamities.

Would it not be the case that the Government's liability would be so great that it would pay the Government to carry its own insurance; in other words, to make a grant when it is necessary? Would that not meet the situation?---Yes, providing they made it fairly fast, and did not wait as in the type of things which happened this year, when large areas got burnt out and people have been very distressed. It might be that only a small area and only few properties are involved, and the people concerned are living on the charity of their friends or the people in the locality. I think the people concerned should get quick relief until the grass grows green and they have feed. That is the type of thing I had in mid because in the type of disasters that have occurred this year the response was more or less instantaneous. The general public is weeks ahead of the Government in acting towards relief. I know of two isolated cases this year. One chap lost all of his hay. He has got through because of the generosity of people living nearby. In another case, all the pasture was burned. The man's store of fodder would have been used by now. But with local help he can now go through to the end of August. These are the types of people who should receive consideration, and grants from the Treasury.

You are thinking of a disaster relief committee?---No, I was not thinking of that specifically. I am not in favour of that sort of thing. I think there are too many anomalies in them, and a lot of backbiting. One chap will say that another did not have half as much land burned as he did, yet the other person got more cash. I was not thinking of going through a relief committee.

You are thinking of the whole situation being so organised that a person automatically gets compensation for loss from fire?---Yes. I wouldn't know how to go about it; but I think various organisations could be asked, and information got from them. The Farmers' Union might be able to do something on that

line. They have been asked to set up a national insurance scheme several times. I don't know what information they have at the present time.

You mentioned fire prevention lectures: They could be included in the school curriculum, and lectures given by forestry officers and members of the town voluntary brigades and fire officers?---Yes.

Why do you select town voluntary fire brigades? Do they stand high in your opinion?---Not particularly high; but they look impressive with their brass buttons and red hats, and they look good to the kids. Impressions go a long way. I think it would be a good idea if the Education Department would include it in their curricula; that lectures be given once or twice a year. We have approached them once or twice, and they have said that their curricula are so arranged at the present time that it would mean a substitution and they could not upset their standards already worked out. I think it would be a good thing for children to have an insight into fire prevention while they are still at school.

You speak of publicity on fire prevention being given to non-English-speaking migrants. That sounds quite a good suggestion to me. Do you know of that being done anywhere other than the bushfires world?---No.

I am wondering what put the idea into your head?---Where I am I am surrounded by tobacco growers. They are Slavs, Macedonians, or Greeks. Only recently they would light a fire at any time. If you told them about it they would tell you they didn't know. If you said there was a notice in the paper, they would say, "We can't read". That could be an excuse; they can read their income tax bill. I think it would be a good idea if they had this type of thing, relating to the laws of the country, submitted to them so that they could read it in their own language. They probably could not understand it in English. At the present time the migration authorities are against it because they think that all people coming into the country should learn English and they don't subscribe to pamphlets being given to them in their own language. They say they should learn English quickly.

I take the view that we are not so interested in the older migrants as in their children, because you cannot kill the old customs as quickly as that. The children will grow up and learn our laws, and that is all right; but it is the older people who can cause damage, and I think they should be given an insight into the devastation that can be caused by a fire lit in all innocence.

BY MR. MCARTHUR: On the question of finance, you have made some reference to a 3 per cent. fund and follow it up with the words "which they won't touch." Would you give me some idea of what that fund is, and its purpose?---It is a specific amount as far as I know, which is set aside for entertaining dignitaries who come into the various local authorities; to give to charity; and to expend on small things that are not specifically covered by road board finance. They give money to hospitals, or donations to the Red Cross or Rotary, or something of that nature. That is what the 3 per cent. covers. I do not know what it is 3 per cent. of, but it is always referred to as the 3 per cent. fund and it goes a long way towards the cost of giving civic receptions to high commissioners and other high-ranking officials who come into a district at any time.

I have a question on the matter of roadside firebreaks. Do you consider these firebreaks are to be used to prevent fires starting, or more as a means of stopping fires once they have started?---Initially, to stop fires from starting, but they can be used as places to burn back from or to organise a place to burn back from. If you have a fire and you are using power pumps, or that type of equipment, you need a fairly safe area to pull into to start operations from.

Do you consider there should be the provision of more road side firebreaks; in others words, a fire-place where people can stop and boil their billy in comparative safety? There does not seem to be too many?---I do not think there is a great many, but I do not think people care so much for stopping on the roadway to boil a

billy if they can go on a little further and pull into a cafe of some description. I do not place much importance on roadside fireplaces. If you make them, they will take a lot of keeping clean of inflammable material such as leaf litter and so on.

T.S. CROUCH,
9/5/61.

On the question of education I take it that schools over here do not have a fire prevention week as is the case in other States ?- Not to my knowledge. I do not think they have anything at all instilled into them on fire prevention. They certainly do not have a fire prevention week.

BY THE COMMISSIONER: Have you ever been to a fire school?---Yes.

Do you place any value on them?---Not a great deal.

What would you consider the main reason for that?---I did not learn anything I did not know before. As far as I am concerned it is a matter of commonsense. Every fire is different from the next. You cannot lay down a blueprint for fire fighting. There are certain rules that must be observed, but once a fire has started it has an individuality about it. I was quite interested in the lectures given at the school, but I was not very impressed with them.

You are thinking of the actual fighting of a fire. I was wondering whether schools would not assist brigades and local authorities to co-ordinate their efforts before the season started, or at the beginning of a season, in the event of something happening; to arrange, say, a co-ordination of burning off efforts between districts and fire brigades where they could help each other?---That is something that would be better and something which I would like to see. It should be left more to the local authorities and the Forests Department to get together and arrange for more burning off. Over here they have different times. At Manjimup it ends on the 22nd December. It seems a good date and fits in. In a wet year you could get an extension of a fortnight to burn out pockets that could not be done earlier. At Bridgetown it closes a week earlier, but there is only an imaginary line between us. That is where you strike the difficulty - where two or three road boards meet and where each is in a different zone and where there could be a fortnight's difference in the opening and closing on

either side of the line. I think the local authorities and the Forests Department confer more frequently to plan fire prevention. I do not think it should be done at schools.

I did not mean that it should. I thought perhaps you would receive some instruction in your thinking as to whom to see, etc.?---I would not turn them down. I was very interested in what was said but I did not learn much. I have been advocating for the last four years that Manjimup send a fire control officer to the school held here every summer, but it seems to be at a difficult time of the year for some people; or perhaps they are not interested. I think a lot of this is due to apathy. I think I am the only one that has come up from Manjimup.

I understand that in addition to its being a school, they also have a conference and that to some extent there was discussion. Did you find that helpful?---Not to a great extent.

Do you think any of the others at the school benefited by the discussions and lectures given?---I could not say.

You would have the idea that some others expressed the opinion that they did not benefit?---I do not think anyone benefited to a great extent. They were all interested in considering the various aspects such as lectures from the Meteorological Bureau etc.; everyone was interested in that. Mr. McKay had a lot of questions fired at him as to why he did not put in the wind directions in his forecast.

It was very educational, but I do not think anyone gained much as far as fire fighting was concerned.

Are there any directions in which such a course could be improved?---The Bush Fires Board could carry out improvements by having small schools or conferences in areas throughout the State. The difficulty is to get the people to attend. It is a good move and the Bush Fires Board is willing to play its part. Several years ago, after I had been up here, I got an officer to go down to Manjimup and Northcliffe to give demonstrations and lectures, but it was not worth his while because of the attendances. He took along dry powders and extinguishers, and he was prepared to answer queries on various aspects of the Bush Fires Act. Over here, the country and the conditions vary so quickly that you cannot put down anything specific to cover a large area.

BY MR. HALE: I take it you did not gain anything from the school, but I understand you were fully aware of the insurance angles and of your powers under the Bush Fires Act?---I did not say I was fully aware of all the insurance angles, but I had read the Bush Fires Act and was aware of the powers of a fire control officer. Since then the insurance business has been brought up to date. Fire fighters were then only entitled to workers' compensation, but now they are receiving more than they received then. At that time claims for equipment could only be made over and above the comprehensive policy, but that does not apply at present. The insurance business has been changed so that all of it goes through the road boards and the Bush Fires Board; the claims are met by the combined totals through the Bush Fires Board. I do not know everything about that or about every angle of fire fighting.

BY THE COMMISSIONER: You know all that is useful to you from a practical viewpoint?---I hope I do.

(The witness retired.)

THE COMMISSION ADJOURNED

WEDNESDAY, the 10TH MAY, 1961.

ALLEN HERBERT SUTHERLAND, further examined :

BY THE COMMISSIONER: You were referring to the Augusta-Margaret River fire on page 17 of your evidence, in which you said, "A bad fire season only occurs occasionally, and it is apparent that the effects of the abnormally dry season this year were not fully appreciated locally. The Bush Fires Board was not directly concerned with the fires which occurred in the area, the assistance provided was presumably organised direct by the State Emergency Service". When there is an abnormally dry year like that one, would the Bush Fires Board take any special steps to get in touch with the various local authorities so that they are appreciative of this situation?---No, not unless something gave rise for this action to be taken. There was another major difficulty - the weather forecasts. Over a period of five or six days prior to the fire rain was forecast on every day except one. The tendency was for these people to burn before the rain came, so as not to spoil the year's work. It is usually a pretty damp area.

You said that the Bush Fires Board was not directly concerned with the fires, and that presumably assistance was organised direct by the State Emergency Service. Someone would have had to approach the State Emergency Service?---I do not know what happened there. The Forests Department provided a good deal of the assistance. I presume the State Emergency Service came into the picture somewhere.

You are only presuming that?---Yes.

In connection with the Denmark fires you say that the local brigades involved had done reasonably good work, but there was lack of co-operation and it is considered they did not receive the support they should have had from the other parts of the district not directly affected.. Can you give me something more definite than that, or suggest an officer of your board who can give this information?---Mr. Hale can give you this information direct.

You mentioned the other fires which occurred, the four of them which you have not described. Would there be any other fires of which your board has information, and which information if I require I would be able to receive?---It would depend on the fire. Some of the reports concerning fires are not yet in. There was a large number of outbreaks at this time.

That is, the reports from the controllers who took charge of the fires?---Yes. Some of these are not in. We have knowledge of some fires which are not mentioned here. Over this period there was a considerable number, but most of them were confined without serious damage being caused. Therefore they have not drawn much attention.

They have interested this Commission, because the causes of the fire are very important. Although a fire might not reach any proportions, the cause which was the greatest factor in the lighting of the fires would be revealed by the information in the report?---They are not compelled to put in such reports until the 30th of May or June each year, according to the Act. What we have tried to do is to give every officer a report book with the idea of getting an immediate report. Some come in, and some do not.

Could you take any action to try and get them in by the end of this month, by writing to the local authorities?---Yes, we could do that. There is a considerable number, but I do know about many fires of which we have not received local reports.

I would like to receive from the board a statement setting out the district of each fire reported to the board, the extent in acres it burnt, the time it escaped, and the cause of the fire. That would be very useful?---All our fire reports are submitted under those headings mainly. Some of the information is a little indifferent.

Would you have it summarised in that form for the previous five years?---Yes. The basis of classification may be slightly different going back, but I think we can give it to you for the last five years.

It is rather important to see whether this was an abnormal season when an abnormal number of fires occurred?---We have one major difficulty with fire reports. Even the official returns from the local authorities are not, to our knowledge, anything like complete. Unfortunately they are not even aware of some fires in their districts, because the brigades would put out the small fires and the people would forget about them. There has been a tendency for the volunteer officers not to disclose the cause of the fire, unless they are very certain. We have been trying to educate them to give the suspected cause. We have gone to considerable lengths to educate them to all fire angles without anything like complete success.

The probability is that most of the small fires which they do not report, do not occur at dangerous periods and are not of as great a consequence as the larger fires?---Possibly. They still happen in the bad period.

In connection with the Denmark fires you say there was a lack of co-operation. Could you expand on that more fully?---Lack of co-operation more or less between the brigades and some of the residents, plus the fact that quite a lot of the farming community did not go to fight the fire at all. It was fairly obvious to me there was need for some re-organisation. It used to be fairly well organised in some respects, but whether or not there

is co-operation is another matter. It is a difficulty we have had in this type of district where there are many small properties located among extensive timber or Crown land, in isolated pockets, and the residents do not work so much as a community as we would like.

Apparently it is largely due to the scattered settlement in the district?---Yes, partly.

You suggest under the heading of "Forests Department Protective Burning" that when forest land adjoins settlement, it is considered the bush fire warden can assist considerably in co-ordinating protective burning programmes between local brigades and residents and the Forests Department officers concerned. Have you any reason to think that the Forests Department would have any difficulty in getting co-operation from the people on the boundaries?---We do not expect them -- or we could not expect them -- to go to individual settlers. It has to be some type of group effort and in some cases that may or may not exist. There is a fair deal of misunderstanding too which we think the warden could clear up. If the local people are willing to join in the co-operative undertaking we think the wardens could do a good deal there because they know the people. It is much better from a Forestry point of view to have a group undertaking than go to every settler around the boundary.

I was just wondering on that point. If I had foresters under me I would like them to be acquainted with every neighbour on their boundary and if they were in that position it would be much easier for them to arrange that co-operation with those people who should be their neighbours and friends than for the warden to come in and do it for them?---It is not a question of doing it for them. You are working on different lines. You get a divergence of opinions. I was not referring to that aspect at all. In that case of course you get a whole lot of isolated and different ideas. If they are going to do a co-operative burn they should all get together, apart from the fact that the Forestry might have individual knowledge of the settlers. Putting it through as a type of scheme is what I was implying.

I think when you read "Hansard" you will have difficulty in following that. I could not follow what you meant. I think you made two suggestions. I am suggesting that the Forests Department could co-operate with their neighbours, if necessary arranging them to work as a body?---Yes.

Do you see what I mean?---Yes.

Now could you tell me what you were suggesting your wardens should do? Are you suggesting that your wardens should do that for the Forests Department?---Not entirely, but to assist, possibly in getting the local people together or solving difficulties. Very often you do get that friction or misunderstanding. It has already been done in some areas but it varies a great deal on personalities. We think it is the warden's job.

But it is really up to the Forests Department to call the warden if they think he could - - -?---The local people we were thinking of, not so much the Forests Department. No, we are still at cross purposes. It is just the fact that the warden could assist, we think, from the angle of the local people in finding out perhaps what they want, trying to explain the Forests Department point of view and getting two bodies to work together. Sometimes those difficulties will arise.

If the Forests Department did not call him in it would not have much knowledge of the places where difficulties arise?---When wardens go around the district they call on the local officers and hear of the problems.

Local fire control officers?---Yes. I will tell you for instance of one problem that does arise a fair bit and has been raised by us. Although there are reasons for this there was a good deal of complaint from Serpentine-Jarrahdale settlers who lived within two miles of a State Forest. They complained that they had not been allowed to carry out protective burning of country on their own properties. That is the type of thing the warden can pick up. He would hear about it on his patrols.

When you say they were not allowed to burn, do you mean the Forests Department would not allow them?---Yes. That has been the complaint -- that they were not allowed to burn. There were reasons for it of course.

Yes. You say in the first paragraph on page 18 that the power to take action for the reduction of fire hazards does not extend to Crown lands. From what I can gather to date, no one is appointed to look after or dispose of hazards on Crown land or look after fire protection on Crown land. Have you any ideas as to what might be done in that direction?---It is rather a major problem as to what is practicable. There is such a wide variety of land involved. Some of it is difficult of access and access is a major problem anyway. Where actual fire control is needed, the local people can sometimes not get in to some of the land because of lack of access. In addition, of course, access tracks would break it up. But then you get into problems of some of the very large areas where it is an uneconomic proposition to do that. Of course there are fairly large areas of plain country along the north coast where war service settlements have been opened up to an extent but there are very large areas there that in some years have been a serious problem. There are no settlers there and it is difficult for the department to handle.

Which department is that?---That would be the Department of Lands and Surveys which really controls the Crown land.

Do they accept any obligation in regard to protection of those areas from fire?---In the main, no.

What I really asked was whether you had any suggestions as to how that problem could be tackled?---It would have to be gone into very carefully to classify the various areas where the major problems arise.

You have not worked out any scheme to date?---No. There is a point there of course that control officers are authorised to enter Crown land to carry out burning of a protective nature. That has developed in this State because I think of the very great extent of the Crown land. It has been looked on as an impossible proposition for the Government to tackle except in isolated cases.

If people bordering Crown land care to organise to burn fire breaks around the Crown land, you would not expect any objection from the department?---They are authorised to do so under the Act if they have a permit. That is the private individual adjoining Crown land can put in a fire break if he has a permit. The fire break can be up to 10 chains. There is a difficulty in that it can only be done as protective burning because there is nothing to stop it on. Some have gone to the extent of putting in fire breaks but only burn at selected times of the year when the fire will not run too far.

You would say that Crown lands are public estate and that if the persons living around them wished to protect themselves from anything on that land whether fire, burning, or anything else, it is up to them to take the initial measures themselves?---That is so. That has been the attitude. In addition the control officer has no limit as to the protective action he can take on Crown land.

Do you think that is satisfactory?---It has worked in many areas. They are quite happy provided they can go in and burn.

I was looking at a report you made to the Chairman of the Bush Fires Board, which you handed in as an exhibit. It is dated the 27th January, 1961. On the top of page 3 you say that late in the afternoon "I was advised that a request had been received from the Forest Control Officer for the release of S.A.S. forces at Keysbrook to assist the forestry". That is Tuesday the 24th, I take it?---Yes.

I was just checking it up, as a statement made in the minutes. On page 4 you refer to the offer of the Shell Oil Co. to make available a large 4,000 gallon road tanker to establish a mobile water point?---Yes.

Is that a frequent service which you receive from the petrol companies during the fire season?---No; that is the first time, to my knowledge, that such has been offered to us. We realise the value of these in certain circumstances, where there is good access, and they have definitely assisted us at some of the subsequent fires. Gidgegannup is one in point; we had eight, I think, at one stage.

A very useful service, I should think?---Extremely useful in that case; we were working from a road.

On page 5, the second paragraph, you say that a complete review will later be made of this fire -- that is, the Keysbrook fire -- and of the lessons to be learned both in individual districts and also in emergency organisations so far as this board is concerned. Has that been done yet?---No; it has been more or less left. These reports, almost entirely, were written hurriedly straight after some of these fires, to keep the Chairman in the picture, really.

Are these reports here in their entirety? I notice that on some of them the signature of an officer appears at the end, and on others there are little blank spaces?---No, there is nothing taken out of them. We have a very limited typing staff and we had to split the reports up to get through.

Here is one that appealed to me: Your next report dealing with the fires at Lesmurdie, Gidgegannup, Mandurah and Denmark. There is a little bit about Gidgegannup road logs?---The Mandurah fire? This is written from a log. The Mandurah fire came in there. The Mandurah fire is really an interpolation, and that is when it actually occurred; and we go back to the report on Gidgegannup virtually.

In the second from the last paragraph on page 5 you say, "It is almost inevitable that the Keysbrook fire would have been lost without the communications provided by the S.A.S., and although these were very helpful they were not entirely suitable for the purpose." That refers to the walkie-talkie outfits and their limited range?---Yes; plus the fact that they were with Army operators and not specifically with the control officer.

Going on to these fires at Lesmurdie, Gidgegannup, etc., in the 5th paragraph you say, "Eight petrol tankers from the various oil companies arrived during the Thursday afternoon. Several of these had independent pumps and long hoses and were of considerable assistance in putting through backfires on Thursday evening, as well as keeping all units supplied with water." Have you any suggestions to make as to how it might be possible to utilise that service with more efficiency? Special types of tankers -- would they not be eminently suitable?---This was done in rather a hurry. They came straight from the road, some of them. Some of them had independent pumps but only short hoses. It would have been a big help to us in one instance if they had been able to couple hoses together to give a greater reach. In this case we were working almost 15 miles of main road. It could definitely be better organised, but just what we can do with the oil companies, I have not gone into. It did meet the need here very well. They could have been little better, and I think perhaps when you call Mr. Hale he could give you more detailed information. But several of them had long hoses, which gave them a pretty big reach, and they did excellent work.

You have the idea, I suppose, of endeavouring to organise that for the future?---Definitely.

On the next page you refer to the fact that you contacted Colonel Williamson in connection with getting assistance from the Military. That, I presume, is an unusual action compared with your normal way of obtaining services of the Military?---Not entirely. Colonel Williamson is a representative on the emergency committee. We had already had approval from the Commissioner of Police to go to the Army. Why I contacted Col. Williamson was purely to seek his advice as to whether they had anything further and whether they could assist us with military police motorcycles -- runners, we were going to use them for. I only rang him direct, more or less to get an appreciation of what the Army situation was. I had to make a direct approach to the Air Force too. They would not come back. Before my arrival, apparently, there was a good deal of misunderstanding about this matter. There was a new C.O. of the Air Force set up here and apparently they got the idea from someone that the Air Force would not take part in patrol activities. It is very difficult to differentiate, but I had to get on to them direct, more or less to sort out the tangle from the previous day. They had been standing by and had then been told not to worry, and they were a little bit upset about it. (a) I wanted to sort it out for the future, and (b) we did need help that morning and I explained to them what we meant by the importance of the patrol, having men there in case there was a break, which with the extreme conditions was likely.

But they did make their services available?---Ultimately. Actually, what happened, the police inspector endeavoured to get them back, and knowing the setup a little better I went to the C.O. and explained the whole position to him and he agreed to provide them. There was some misunderstanding.

BY THE COMMISSIONER: On page 3 of the report you refer to a man who consistently disobeyed instructions from fire control officers. That is to be found in paragraph 4. That case is under coronial inquiry at the moment?---A decision will be given today, I understand.

In these minutes of the meeting of the Bush Fires Board you have not said whether any motions moved and seconded were passed. I presume they were passed, or you would have said so?---That is so, yes. There have been disagreements and arguments amongst members, but for 20 years, normally, apart from one or two exceptions, their final resolutions have been more or less unanimous; and that is where that omission tends to creep in.

I will not ask you any questions with regard to statements made at the meetings because it would be only secondhand. On page 6 under "Aerial Reconnaisance" you say, "As moved by Mr. Curtis and seconded … as observers." Do you know if any action has been taken to go any further with that decision?---No, there has not. These minutes were submitted to the Minister who decided to take no further action pending conclusion of this inquiry.

Do you have any difficulty in getting planes for aerial reconnaissance?---We have not had a great deal; we have had no difficulty. They are available from the aero club and I think they would have been prepared to have one on stand-by for that purpose. We also occasionally obtained one for the recent fires from the Air Force.

Do you know what type?---A Dakota, I think. The Air Force planes, on the whole, are not suitable.

Are they fairly expensive?---They have not raised a charge yet. In that case the Army detachment here is a special air service and they work in close co-operation, and that is the plane they actually used.

The Dakota?---Yes. I think in that case they were looking on it more as an exercise with the Army.

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They are very good as a rule. Have you ever thought of using the Aero Clubs?---That is where some of the planes came from that we had. The one at Gidgegannup was an Aero Club plane, I think. This was more a question, of course, that there would probably be advantages in the matter of training. The board did question the angle of the Aero Club and decided to approach it on this basis first, mainly on the point that there would be other uses than fire for the plane. If planes have to be hired, there is difficulty over finance. Thinking more on behalf of the Forests Department, we would not hire planes unless there was an emergency.

What I had in mind was whether you could not organise a service from the Aero Clubs which would be voluntary, the same as you receive from the brigades, fire controllers and other people; in other words, whether, given the opportunity, they might not be glad to render such a service to the community?---They charge for it, unfortunately. They look on it rather commercially, I think, but this has not been discussed with them. I think they might co-operate, but I do not think we would get volunteer service from them. I am certain we would not.

Do you know whether their charge covers just expenses, or whether they would take the opportunity to replenish their funds?---No; I think it is a reasonable charge. It is a somewhat commercial, competitive basis, I should say; and in my opinion they are fairly reasonable.

Are there any people in this State who do act on a commercial basis in such matters as spreading fertiliser?---Yes.

They might be very good pilots and well adapted, knowing the country, to give you assistance in reconnaissance?---They are somewhat difficult and they do move about a great deal. I think the Aero Clubs are probably the best set-up to provide a continuous guarantee from within range of the metropolitan area. Crop dusters would probably come in further out in the country where aerial reconnaissance of much of our State is not quite so important.

What do you mean by that?---I was thinking of the wheatbelt and the wheat areas where it is very rarely that you cannot get a picture of a fire from ground reconnaissance, and where aircraft would hardly be warranted, unless there were crop dusters in the area. They have been used in one area where there was considerable Crown land, sandplain of a scrubby type. In the Gnowangerup district they had a plane stationed there by a private individual who ran a type of service linked in with the medical service and who did all sorts of jobs. He did quite a lot of work with the brigades, but they could manage without him.

On page 8 of these minutes you deal with the immunity of brigades carrying out protective burning on forest land. It was moved that brigade members carrying out protective burning on forest land with the permission of the Forests Department should be subject to the same immunities as when carrying out normal protective burning. Does that not follow naturally?---No. There is a doubt, and a very strong doubt. The approval in the Bush Fires Act for the control officers to enter upon Crown lands specifically excludes forest land. I do not think there is an authority for them to burn on forest land. While we are discussing that, it does link, in a way, with the point raised by Mr. Crouch yesterday in connection with section 38 in regard to burning on roadsides. I can tie these two together. Unless they are definitely carrying out a duty of performing a function specially stipulated in the Act, they do not come under the immunity. This one is doubtful because the question of their right to go on to Crown land specifically excludes forest land, for a reason. Then, if the Forests Department gives them permission to on, they are virtually acting as agents for the forestry, I should say, although they could not accept responsibility for them. It seems to lead them in a bit of a vacuum so far as our Act is concerned.

It does not sound very reasonable. Supposing they are fighting a fire on land outside a forestry reserve and a fire entered the forest reserve and they had to pursue it into the forest?---That is a different matter, and it is

covered. This is for protective burning; the lighting of fires when they are not fighting fires. There is a distinct difference.

A.H. SUTHERLAND,
10/5/61.

Can you give me the reference to the sections in the Act?---The burning on roadsides which I mentioned is a slightly peculiar section. I think the tenor of it is that a local authority may direct its control officers to burn bush on the margins of roads as a protective measure. That is where the misunderstanding comes in. There was a lot of objection to that. They overlooked the second provision that the bush fires control officer does not have to carry it out. He may carry out the direction. If that direction has been given by the local authority, who after all controls the roads, then if he is doing any burning he comes under the immunities. That was done on the advice of the Crown Law Department, as the best protection we could give them for roadside burning. This is possibly hearsay, but I have discussed this immunity with the Crown Solicitor on several occasions, but it has never been decided in court. They are strongly of the opinion, however, that what you could look on as a minor legal negligence would not breach the immunity clause provided he acted in good faith. They thought it would take a major type of negligence to negative that. That was what Mr. Crouch was getting at, if they were negligent; and it is easy to be legally negligent.

What is the section dealing with refusal to burn on roadsides?---It would be section 38, subsection (5). The other reference you wanted was section 34 which deals with the burning on Crown land. Subsection (1), paragraph (c) of that section deals with the bush fire control officer going on to Crown land.

That says he may go on to Crown land?---Yes, but you will see that it excludes forest land.

Would not they regard forest land as occupied land? It is vested in the Conservator of Forests as a body corporate?---Yes, it is specifically excepted mainly on the basis that we do not consider that a control officer should be able to enter forest land and burn without their permission. That exception does remove any authority

as far as we could see from a control officer to go on to forest land with the immunities of the Act.

That is very important?---Yes.

I notice that for the purpose of investigation in one fire you appointed several members of the Police Force as wardens. Did that work satisfactorily?---I did not want to do that. At the time it was a point of doubt when that fire occurred. The papers had gone to the Crown Law Department for a ruling on this. In the meantime I was caught with an awkward decision on the matter. The reason for this was that we had discovered there was no real authority for a bush fire control officer to enter on any land to investigate a fire once the fire was out. No one had realised that before; but wanting this inspection made and in an attempt to avoid the officer being sued I felt the only safe way out of it was to give him right of access by appointing him a warden.

You mean a fire control officer can be sued?---Yes, for improperly entering. That has been confirmed by Crown law. That is the position under the Act at the moment. Owing to some oversight in drafting, it has been there for 20 years, and we have only just realised it, the control officer has no legal right to enter on land to investigate a fire once it is out.

He has power under section 14 to investigate the cause and origin of the fire which has been burning on the land?---That is a warden.

Where are the powers of the control officers?---It comes under section 39. Paragraph (b) gives him the right of entry, but it is all qualified by the first part of the subsection which says, "in the exercise of his functions and the performance of his duties." Nowhere in the Act is it said to be his duty to investigate a fire. We thought we had better take the safe way and make them wardens.

It worked quite satisfactorily and there is no reason why it should not be adopted in the future?---We do not want to adopt that. We hope to amend the Act to cover that point. We do not want to appoint wardens all over the country to investigate fires.

Is there any real objection to it?---Yes, because a warden is an officer of our board. We only have four and a senior warden. There would be misunderstanding if we appointed numerous wardens under our Act.

I did not mean permanent appointments?---We would have to do it temporarily, until we can get the Act amended.

Reference is made to certain knapsack sprays which were defective. Do you know the nature of the defects?---Not entirely, except that they only operated for a short period. It would be a case of buckets being allowed to dry out and things like that. I think in some cases the hoses also developed trouble. I think it is rather a sweeping statement made in the heat of the moment. Quite a lot of these deficiencies were cured. But it is a bad thing.

One of the terms of reference of this Commission is to make a recommendation regarding the establishment of an emergency fire service. Have you any suggestions to put before the Commission in connection with that?---Not at this stage. In my view this matter is fraught with many intricacies. Before answering I would like to give it more thought than I have been able to give it.

Would you be able to give the Commission some ideas on that subject?---We would be able to give some appreciation. We think that some set-up such as the State Emergency Service would work quite well. Some organisation of that nature is necessary for contact, but there is the difficulty of control.

Another term of reference is to suggest measures which would assist in the protection of life and property when bush fires occur. Have you personally, or has the board, any suggestions to make in this direction? I am thinking of such property as houses, equipment and motor vehicles?---No suggestions to represent to the Government. I should make the board's opinion clear. The board has strongly held the opinion for some years -- whatever else the local authorities might have done -- that property owners must be compelled to clear all hazards from farm buildings, haystacks, and the like. It has been the inevitable experience for brigades to put in an enormous effort in saving buildings and property of that type, when one or two persons could have looked after the building if the property had been adequately protected by removal of hazards and the like. The board feels that the local authorities should exercise their powers to insist on the removal of hazards and the creation of fire breaks, to ensure that such property as I have mentioned is protected. In some districts that is being done very well.

Has the board any ideas as to how the public might improve the protection of their property by the use of non-inflammable tanks or by the type of construction?---We have not gone into that at all. From my own knowledge of what has been done in the past -- and we have not a complete assessment of this State -- the

majority of the fires started inside farm buildings anyway. The sparks either enter underneath, through open doors, or into the roof space. In the exceptional circumstances of the Dwellingup fire, the position might have been different possibly. However, most of the fires on farms have started inside the houses.

In the schools conducted by the board, have lectures been given by the officers from the town fire brigades on the methods to protect houses from fires?---We have an officer doing this, but he has been dealing more with the question of fighting fires in buildings rather than this other angle.

Has the board sent out any circulars for general distribution to householders in the country as to what they should do in the event of a fire?---That has not been done by the board, but we have drafted circulars for local authorities for distribution to householders.

I would like to see one of these circulars in which methods are suggested for the protection of property?---This matter has been covered a number of times in "The Firefighter" which I shall furnish. It has been a subject dealt with in the fire schools. We have dealt extensively with the question of protection of buildings, because it has been looked upon by the board as a major factor -- not for the protection of the buildings but for the manpower it tends to draw off.

Yesterday I asked if you could tell us whether the Margaret River-Augusta area was an approved area but you were not sure. Have you been able to check on that?---The Margaret River-Augusta area is an approved area but I wanted to get the conditions. Going through the fire affected areas the Serpentine-Jarrahdale district cannot be one, because that district has not a brigade. The Murray district is under consideration at present. Waroona and Harvey are both approved areas.

Would your board have an idea of the cost per acre of controlled burning?---No. That has not been put up but the officers can give some idea on some aspects. This is more a Forestry matter.

Is the board carrying out any fire control research work, because I notice that is in its functions?---One of the difficulties is that we have been up against staff. Personally I have considered various projects. We have done a small amount of work on weed killers from our particular viewpoint. We have another project being conducted by Mr. Hale at the moment on water additives, which we hope to try out in the spring. Other than that, I cannot say that we have entered into any research project.

Have you been in touch with the C.S.I.R.O. about that sort of thing?---We have not had a great deal from the C.S.I.R.O. I receive most of the publications on fire matters, but there has been a lack of liaison with the C.S.I.R.O. It is one matter on which I shall approach Mr. McArthur. All the States raised the point that it is necessary for the creation of some central authority from which we can all get that type of information.

Probably there has been very little published on their work. I know they are doing a lot of work in this regard and they could give you a lot of useful interim information?---I have knowledge, though not direct, of what they have been doing. If we felt they were working on an angle which interested us I would follow it up as an individual case. We had some idea of the work they were doing, until the last 12 months.

I presume the board will agree that if you wanted to carry out scientific research you need scientists, and the scientists need scientific direction. It would be difficult for the board to carry out scientific research. Obviously there is much investigation and experimental work which can be carried out by the people from a practical aspect. Would the board be prepared to do that when it has the necessary staff?---I have discussed

various projects with junior farmers along the lines upon which they could undertake research. The extension officer is fairly well aware of our views and the angles which may be covered. We are hoping to get ahead with various projects this year.

I presume you are aware that Mr. McArthur is not a member of the C.S.I.R.O.?---I was referring to the conference of all fire authorities last year. We have no definite conclusions yet. It was the general opinion of every service in each State that there was a necessity for the interchange of information, or for such information to be handled by some authority. At the moment that is being done piecemeal and one obtains the information only by chasing it.

If they decided they ought to do some work on research, they would have to find out where they could get the money. I take it there is no provision made?---At one stage, being so far distant, we did try to get some setup in relation to spark arrestors on tractors, something on the lines the Australian Tractor Committee is doing, to be set up at the university here with the idea of encouraging some local producers of these things. However, a lot of difficulties arose.

Any work of that sort would be done in conjunction with the Forestry Department I suppose, would it?---Not necessarily. I do not think that had really been considered at that stage. It was a question more of the university and actually one of the big engineering firms was interested at one time and was prepared to set up some of the stuff for us.

The Forests Department would be very interested in the same subject I take it?---They would get it ultimately and would probably be brought into it, but we only got to the stage of preliminary inquiries.

I was thinking generally, not of that particular case. If you were going to have an investigation of that nature made you would seek the co-operation of the Forests Department?---As you say, there is very little we can go into ourselves.

How many fire weather officers have been appointed, can you tell me?---Not off-hand.

Have you a rough idea? Would it be half a dozen or a dozen?---Oh no. I should estimate it would be in the 60's to 70's.

I see. Nearly one for every road board, or are there more than one in a road board?---A fire weather officer and a deputy may be appointed to each road board, but it is a road board appointment over which, in this case, we have considerable control. The action is twofold. First of all, the road board has to be approved as one which can appoint a fire weather officer, and then of course it can appoint one with a deputy. Only the two are permitted in a district. There is no provision for one to be appointed for a number of road districts because it is not practicable.

Yes. I notice that they are entitled to have an advisory committee to assist them if they wish?---Yes.

That advisory committee is purely a local authority appointment?---Yes.

There are one or two things in the Act I would like you to clear up for me if you would be good enough. Have you a copy of the Act there?---Yes.

Section 22(3) reads --

> Before setting fire to the bush on land which is adjoining railway land or forest land, as provided in the last preceding subsection, the occupier of the adjoining land shall --
>
> (a) notify the local authority in whose district the adjoining land is situated, of his intention so to do and obtain its approval in writing to burn;
>
> (b) prepare a firebreak having a width of at least ten feet and the boundary of which nearer to and parallel or approximately parallel with the boundary of the railway land or forest land is not, at any point, of a greater distance than three chains from that boundary.

Under subsection (4) it states that you must comply with the provisions of section 18 of the Act. Section 18 of the Act says that he has to have a firebreak immediately surrounding the area to be burnt?---Yes.

But it could be 3 chains away?---Oh no.

That is the point I cannot understand?---The idea is that the railways get suspensions of the prohibited burning times mainly because it is impracticable for them to do the whole of the track in the time available. They get suspensions from the Minister usually in the first part of the prohibited burning times. It is not practicable to grant this except in isolated cases after the first January or the middle of January. It is the 1st January as a rule. The same thing applies to the Forests Department. An adjoining owner can burn a firebreak up to 3 chains from the common boundary on his own property. Now that includes any road between, because he is still adjoining; but he can go up to 3 chains. Of course the firebreak is to contain the fire. He puts the firebreak in and burns between that and the burning the Railway Department is doing. He has to do it in

conjunction with them. By doing so he gets the benefit of the suspension given to the Railways or the Forests as the case may be.

Thank you. It is just that I did not see that point. Now in the same section 22, subsection (6)(c)(ii), it states --

> a bush fire control officer or an officer of the bush fire brigade may enter the adjoining land and set fire to the bush thereon for the purpose of making a firebreak.

He can do that anyway. He is not restricted by the three-chain distance from the boundary. He can put it anywhere on the property. I read that to mean that they have such confidence in the control officer that he is not restricted?---I do not think that is quite correct. Although I have not had another look at it, I believe the intention is that where they enter into an arrangement for a co-operative burn, a certain amount of argument arises as to who shall light the fire on the private land. The Railways will not do it because they feel they accept the responsibility in doing so. Therefore, where they are doing a joint district burn we authorise the control officer or an officer of the bush fire brigade to do it, and they burn the whole of the railway line and the adjoining firebreaks in one or two days. This was really only an authority for him to go and set fire to the area on the private land.

I see your intention, but it looks a little open doesn't it?---After a careful study I think you will find that it is tied up because it does really relate back to previous arrangements of burning a 3-chain break.

There was one little point in Regulation 10 which I wanted to raise. I have not had time to study this carefully but it reads -- "Any person acting under the instructions of an authorised officer . . . ." Would you explain what an authorised officer is?---An authorised officer in a fire-protected area issues permits to burn in those areas. The only persons who can issue or give permission to burn in a fire-protected area are officers authorised by the Minister.

There is a general authorisation, you will see, in the regulations that a forest officer is an authorised officer within the meaning of the regulations. But that is limited to fire-protected areas, of which we have only two in this State, one at Mundaring and one at Collie.

Apparently that officer can authorise somebody else to enter upon land in respect to which a permit to burn has been granted and he can investigate the steps taken to prevent the spread of fire subsequent to the main burning. He can enter upon the land?---We have authority to go on to the land. Our control officers have the same authority. They can go on to land if they want to inspect it with a view to issuing a permit to burn--preceding the burning.

I am referring to subsequent to the burning?---This one is particularly limited to those authorised officers.

It is only in protected areas that you can exercise that authority?---Yes; and that does not refer to fire control officers there.

No. I do not know whether there is anything else you wish to draw attention to before you retire?---At this stage I do not know whether you wish me to--there are one or two points I might touch on to clear them up. I would ask whether you would like a typewritten copy of the Bush Fires Act, which is our own consolidation and has not got any loose amendments. This is the only copy in existence, but we could loan it.

Thankyou. We could have it for a short while?---It is easier to have something with the amendments inserted in the script.

THE COMMISSIONER:

Put it in as an exhibit, and it will be returned to you.

EXHIBIT EXHIBIT "B" : Bush Fires Act 1954/1958.

THE WITNESS: I have here a set of lecture notes and the programme for one of our annual schools.

A.H. SUTHERLAND,
10/5/61.

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THE COMMISSIONER: I think that will be very useful as an exhibit.

THE WITNESS: I would explain that this is a particularly bulky one. We went to a good deal of trouble in conjunction with Mr. Lonnie who is the Deputy Director of Civil Defence, who is looking in some ways to our organisation to provide some of the nucleus of the Civil Defence. There are a lot of notes prepared there, information which was not intended to be lectured on. This was prepared for them to take away and for them to gain knowledge on the subject. I would say about that school--

BY THE COMMISSIONER: How would you describe that?---These are the programme and lecture notes for the school and conference 1961. The first school which Mr. Crouch attended five years ago has changed quite a good deal. Each school has been asked for its opinion on the school and even during the school they have been given a good deal of freedom. If a group want to bring up a subject it is dealt with and discussed; and also, towards the end of it, they are asked then for their suggestions. The programme has virtually been adopted by the majority of those attending. It is obvious that in bringing representatives from as far apart as Northampton and Esperance you are going to get a wide variety of conditions. A major feature of most of these schools has been--apparently we are still not getting it across that the essential need is for brigades not to be entirely self-contained units but should form part of the co-ordinated district organisation. That is a set of this year's lecture notes. That is the school which finally had to be abandoned in the Dwellingup fire.

THE COMMISSIONER: The programme will be Appendix "A" and the lecture notes Appendix "B". In the mind of the Commission there is no doubt that a person learns much more at any school than he realises.

THE WITNESS: There is an almost complete set of our journal. I do not want them back.

THE COMMISSIONER: They can be tendered.

EXHIBIT EXHIBIT "C" : Bush Fire Board journals.

THE WITNESS: I think that No. 12 is missing. There was one number short printed. Our publicity:

We find it very difficult to keep specimens. I would point out that quite a lot of these little pamphlets have been a joint undertaking between ourselves and the Forestry Department. They have done the art work and we have had them published. In some of them you will see them referred to as a Forests Department publication, and inside you will see reference to the Bush Fires Board. Those are a set of bookmarks and annual calendars we put out, which we find to be extremely popular because they cover a broken period. They are issued in September and include the same year. A lot of people, getting towards the end of the year, like to have both years together; also, bookmarks have been very very useful as a form of publicity; there has been a big demand for them, and they go to all libraries in the State.

Do you find much demand for information from school children?---We get a lot from projects. This is something which has been discussed extensively with the education authorities. They are strongly opposed to untrained instructors going into the schools. That type of thing comes entirely under the jurisdiction of the headmaster. I have done a certain amount. The Education Department looks upon it as a waste of time as they feel the children look on it as a bit of time off, and as something different. They prefer to get at it as part of the curriculum. We have given lectures at the Teachers' Training College and there have been a lot of projects worked into the schools. That is where a lot of our posters come in towards the end of the year. They want a particular one and our last copy disappears. We photograph these. As far as posters are concerned it is just to give an indication. A couple of these are rather old, particularly the art type. There have been quite a number more which we cannot locate at the moment.

BY THE COMMISSIONER: There is one thing about the school children--the projects: I have found that it is of great value, in getting your stuff across to the children, if you had a special little elementary publication prepared on the subject which you want them to understand; something which tells them of the danger of fires and how to prevent them occurring. They devour them with great avidity. Do you do anything in that connection?---No special one. Some of the publications are apparently suitable. I have thought for some time of getting out a small manual. There is a school publication and I have done a couple of articles in that. We have had fairly reasonable coverage. I have given a number of school broadcasts. There have been quite a lot of projects. Another project was undertaken in the Geraldton area--posters. They seem to like doing posters and the local authority up there gave a prize, and so did a number of people, and that engendered a lot of interest among school children. What is more important is getting down to the basis of fire prevention. They had to know something about it to draw the posters. That is something I would like to see extended.

Have you ever tried offering a prize for an essay on fire prevention?---Again we desisted on the advice of the Education Department. They say that good essay writers in schools are known, and they very much doubt the value of it. They say you are wasting your time. They say that in any school there will be one or two outstanding children, and the rest of them will not bother to enter.

You will be available should anything occur?---Yes; at any time, we are available at your disposal; and I will put in the various items of information you have asked for as they become available.

(The Witness retired)

A.H. SUTHERLAND,
10/5/61.

HENRY JAMES HALE, Senior Warden Bush Fires Board,
21 Basinghall Street,
East Victoria Park, sworn and examined:

BY THE COMMISSIONER: Mr. Sutherland put in as an exhibit a report on fires attended by yourself. That was a report written by you. Will you read the report as evidence, and then I can question you on it?---Very well.

I should advise you that if there is anything in this report that you do not desire to bring out in public, then just mention it and we will give consideration to it?---Very well. This is the report --

REPORT ON FIRES ATTENDED BY SENIOR WARDEN H.J.HALE.

THE SECRETARY,
BUSH FIRES BOARD:

The following notes are a brief outline of fires attended between the 1st January, 1961, and the 9th March, 1961.

These fires include Lower Chittering, Lesmurdie-Kalamunda, Gidgegannup and Denmark.

In both Gidgegannup and Denmark fires, Warden Straker was present, so notes of these fires will cover both our activities.

LOWER CHITTERING:

This fire was attended for only a short time, that is the New Year stage. No investigation was made or full report of this fire seen, but the fire had apparently been burning for some time.

On the 1st January, 1961, this fire broke out in pasture lands, after having jumped approximately 1½ miles from the main fire; or this is the supposed cause.

After hearing radio calls for assistance, I contacted Mr. Sutherland and received permission to proceed to Chittering to watch developments.

On arriving at fire headquarters, L. Beale's property I contacted Major Clarke of the Army S.A.S. unit and was able to obtain a sketchy picture of the fire area and where his troops were operating. I was not able to obtain any clear picture of what brigade members or other volunteers were doing, or of any plans for the control of the fire.

Fire Control Officer O'Neil advised that he was taking a composite party up to Plunkett's track in an endeavour to prevent the fire from crossing it, or if it had, an attempt would be made to put it out. I decided to accompany this party, mainly as a means of getting close to the fire front to see what was happening.

While on Plunkett's Road, I met fire control officer Pickett, who advised me that his property

was on fire. This was not so, as I had just passed his farm. However, Pickett decided to return to his property and use resting personnel to burn back around his eastern boundary.

O'Neil's party mopped up a considerable distance of fire front which had crossed Plunkett's Road, when it was decided to withdraw to the Brockman River, as the fire was then racing down the Avon River, and the party was in danger of being cut off. It was planned to bulldoze a firebreak in pasture lands along the river and burn back into the fire. However, the property owner, H. Martin, threatened the fire control officers that he would strike any person who lit his pasture, and that he would immediately proceed to set alight the person' own property. After considerable discussion, it was decided to burn along Martin's eastern boundary - a slow and difficult job. This work started at 8.15 p.m. and continued until daybreak. While this was proceeding, fire control officer Pickett and his party had back burnt along his eastern boundary and joined the commencement of the burn along Martin's boundary. This made the front reasonably safe, but patrolling continued for some days.

An inspection of the area at 6 a.m. was made and patrolling commenced.

I left the fire area shortly after 7 a.m.

General:

Although this fire covered a considerable area and had been burning for some time, there did not appear to have been much work done by farmers in the area to contain or prevent the spread of the fire.

It is possible that the New Year outbreak could have been considerably reduced if the Army Avon Valley training area had been cleaned up as had been planned and explained to Army personnel during previous inspections of this area.

I do not think that men and equipment were used to the best advantage during the day of January, the 2nd, mainly because there was little or no communications and contact was very difficult.

The back burning carried out during the evening of the 2nd January, 1961, under the control of fire control officers Pickett, Fox, O'Neil and Smith, was well organised, and taking into account the rough country, very well carried out.

Local authority should order and enforce fire break and removal of hazards. Protective burning must be carried out. Local authority should consider purchase of suitable equipment.

LESMURDIE - KALAMUNDA:

On the afternoon of the 1st March, a fire was noticed burning in the hills to the south-east of the city. I contacted Forestry Headquarters at Como, and they had no report of the fire. Mr. Poole was able to pinpoint its location. I proceeded to Lesmurdie and ran into the fire face near Pickering Brook Road.

Near gale force winds were blowing, and the fire was travelling very rapidly, with roads no obstacle to it.

I joined a group of Forestry and other volunteers in an endeavour to save two houses, but unfortunately both were lost.

Shortly after this, I met Mr. Ferris, Assistant Road Board Secretary, who informed me that there were actually three separate fires. One at Gooseberry Hill, one in Kalamunda townsite, and the other at Lesmurdie. I contacted Mr. Mann, chief fire control officer, to gain information of the other fires and to report progress of the Lesmurdie fire. Mr. Mann asked me to take charge of the Lesmurdie fire while he and fire control officer Redfern would control the other two. As far as the Lesmurdie fire is concerned, fire control officer Heslop and I worked together to bring it under control.

As men and equipment were badly needed I telephoned Mr. Poole and requested assistance, suggested Armadale central unit.

Mr. Poole remained at headquarters until late in the evening. This considerably helped organise outside help.

For a short period I was able to have the use of one of the heavy duty units and with this support a back burn was put through on a road running north-east off Lesmurdie Road, and thus tie up that side of the fire. The heavy duty unit then returned to Kalamunda. All attention was then concentrated towards Wattle Grove and a number of houses. Fortunately the Armadale unit was quickly on the job, and I feel it was directly responsible for saving a number of houses in this area.

At this stage no telephones were available in the area, so use was made of taxis' two-way radio to relay messages to and from Kalamunda.

Considerable trouble was being experienced with sightseers, who had flocked to the area, and though many were warned, continued to travel along the Lesmurdie Road, even though many trees were in danger of falling.

At 2.30 a.m. it was considered safe to let the Armadale Brigade return home.

At 2.45 am the fire broke away from an earlier back burn in Pomeroy road. This was quickly brought under control by the forestry and Forrestfield units.

Forestry units had been controlling the Bickley Road flank and assisting at Lesmurdie Road.

After a further inspection, I reported to Mr. Mann that I was leaving the area, as I considered local people could handle the situation provided patrols were maintained. At 8 a.m. on the morning of the 2nd January, Mr. Mann rang and requested assistance, as most of the locals had gone to work. I suggested that efforts be made to get these people to return home before outside assistance was called. No further calls for help were received.

General:

The lack of communications to direct operations and maintain control was again very evident. Too much time is lost running back and forth, and also the picture has changed before the message is delivered, even if the text of the message has not been changed.

Excellent work was done by the students from the Carmel College, fire control officer Douglas, and also forestry units in the Lesmurdie area.

Recommendations:

More protective burning must be carried out on both private and vacant land.

All buildings must have a greater degree of protection, particularly in the rural areas.

Road blocks or checks would have to be established to keep out sightseers. Motorcycle patrolmen could well be used for this.

Householders should be forced to remain at or return home when a fire is in their area, and not rely on outside help.

Gidgegannup:

At approximately 3.30 a.m. I was notified by Mr. Lonnie that a serious fire was burning in the Gidgegannup area and it was quite likely that outside assistance would be wanted.

I rang Central Fire Station, who I understood had some information regarding the fire, but was referred to the Central Police Station. The information that I received from the latter place was very misleading and confusing. However I was advised to ring again at 6.30 a.m. when I would be able to get the latest report from Sergt. Brown. This report did not throw any light on the situation.

Shortly after arriving at the Bush Fires Board office, I received a telephone call from Mr. Lonnie, stating that the fire had apparently crossed Red Hill Road and that Parkerville was in danger. Mr. Lonnie said that outside help would be needed as the local people had spent many hours at the fire and should be relieved. It was agreed that I should alert brigades from Northam, York and Mundaring. Mr. Lonnie would notify Red Cross, the Public Health Department, and the Shell Oil Company. The latter for the use of petrol tankers for carting water.

Warden Straker arrived in Head Office at approximately 9.30 a.m. and assisted with many of the necessary telephone calls. The Chairman, Bush Fires Board, asked me to report to his office immediately; this I did and advised him of my actions up to that date.

Mr Wallace, Forests Department, who was also present, suggested that he arrange for a plane to fly over the area to plot the fire.

Mr. Smith agreed that Mr. Mullumby, Mundaring Forests Department, should take charge of the fire and operate from Inspector Croker's office, Midland Junction. To assist Mr. Mullumby, Warden Straker also reported to Inspector Croker's office.

As few details of actual fire fronts were available, Warden Straker proceeded up Red Hill Road to ascertain extent of front of fire and main danger points. A.B.C. reporter, R. Rushford, accompanied Warden Straker and rendered considerable assistance.

At this stage the fire had approached the property of Mr. Vucelic (?), and this was being partially held by local firefighters.

An appraisal of the front in this area was obtained and reported to Inspector Croker. Shortly after Messrs. Wallace and Barrett of the Forests Department arrived and confirmed the perimeter of the fire as plotted from the air.

Mr. Wallace considered changeable winds made it advisable that a further aerial survey be made in late afternoon so that plan of action could be co-ordinated when outside brigades were available.

At 2 p.m. I was advised that the Clackline Brigade with two heavy duty units were at Mundaring and ready to move; they were directed to the vicinity of O'Brien's Road, as this was reported the main danger spot at this stage.

At approximately 3 p.m., 30 Army personnel arrived at headquarters. Warden Straker, acting as a guide, established communications centre at Campersic Road, directing one section around western face of fire, to prevent it crossing Great Northern Highway, and another section was directed to assist around the vineyards in the Herne Hill area, working under fire control officer Steel. A second signal unit was sent up Red Hill Road to establish communications, near the gravel pits.

While Warden Straker was attending to these details, reports were being received from a police wireless patrol car, many of which were completely misleading.

Establishment of Army wireless base at rear of Inspector Croker's office was unsatisfactory, and this was resited at the recreation ground.

Mr. Sutherland arrived at fire headquarters during the afternoon.

As planned, a back burn along Red Hill Road, as far east as O'Brien's Road, was commenced at approximately 5.30 p.m. At this time Warden Straker, A.B.C. Reporter Rushford, and myself, flew over the fire area to plot perimeter. After reporting back to fire headquarters, Straker and self proceeded to co-ordinate the back burning teams to survey danger points and unoccupied buildings that had to be burnt around.

This work continued until approximately 5 a.m. when progress was inspected by Mr. Hewitt, Forests Department, and self. At 6 a.m. a front end loader was obtained from Bell Bros. Gravel pit to put a break between Red Hill Road and Burge's Road. Considerable difficulty was experienced in burning around some of the buildings -- these had received no prior protection -- and also in protecting the main telephone lines. The Clackline Brigade did an excellent job in carrying out the back burn, particularly as they did not know the district.

On Thursday evening it was agreed to seek assistance for Toodyay, Baker's Hill, Wooroloo, Mount Helena, North Mount Helena and Talbot Brook brigades, mainly for patrol duties. Also Air Force personnel were requested. The face along the Toodyay road was approximately 14 miles and the danger of fire crossing Red Hill Road and thus threatening Midland Junction and other towns to the south was causing considerable concern. All available forces were placed along Red Hill Road, and four motorcycle patrol men were used to watch for spot fires. The officers were very useful and to me, much more helpful and accurate in their reports than the wireless patrol cars.

A fire was reported in the Hoddy's Well area, so all Clackline and Baker's Hill personnel were released, as this fire could threaten their own areas.

Late Friday afternoon a fire broke out in the Reserve Road area, two patrolmen and a patrol car were sent to the area. Some of the Talbot Brook, part of Gidgegannup and Herne Hill brigades were also sent to the area and back burning around Reserve and Reem Roads was begun. This burning continued until 2 a.m. on Saturday.

At midnight the wireless patrol car and motorcycle patrolmen left the area. Warden Straker and self inspected the area shortly after 2 a.m. The firefighters were in need of refreshments, this being prepared by local Red Cross ladies, and we delivered it to the men.

By 2.30 a.m. all outside brigade personnel had left the area and local personnel were left to patrol the back burn.

Warden Straker and self returned to Midland Junction at 3.45 a.m. and rested until 5 a.m. when the complete area was inspected and discussed with local personnel. On returning to fire headquarters and discussing the situation with Mr. Sutherland and Inspector Croker, it was decided to hand all future control and prevention measures back to the Swan-Guildford Road Board.

Up till now, I have not mentioned the use of the petrol tankers. Quite apart from refilling units tanks, they did an excellent job in dampening down along the edge of the back burn. Several of these tankers had long hoses and were thus able to control a considerable area.

Recommendations:

(1) That the local authority order and enforce firebreaks :-

  (i) Around all cleared land or land used for pasture.

  (ii) Around all buildings.

  (iii) Around the external boundary of all bush or uncleared land.

(2) That encouragement be given to carrying out an extensive protective burning programme.

(3) Local Authority consider the purchase of a suitable heavy duty unit.

It is also recommended that the Bush Fires Board send letter of appreciation to all brigades from adjoining districts who did so much to bring fire under control. Also to organisers of petrol tanker fleet, Red Cross, Salvation Army, Inspector Croker and to Bell Bros. for use of machinery.

In addition, an expression of appreciation to Australian Broadcasting Commission for assistance rendered so ably by R. Rushford, would not go amiss.

BY THE COMMISSIONER: Taking the Lower Chittering area, what was the area covered by that fire?---I could not say at this juncture.

Would it be 1,000, 5,000 or 10,000 acres roughly?---It was nearer 10,000 acres.

Why did you attend that fire? Did you attend on your own initiative so as to be aware of what was going on?---Mainly that. I was on my New Year holidays. When I heard the call for assistance I thought it as well that our board should be completely in the picture as to what was going on.

The local people did not request you?---No.

You say that on the 1st January this fire broke out on pasture lands. Can you give a closer indication of where that was?---No.

You say that after jumping approximately 1½ miles from the main fire, or this is the supposed cause -- have you any evidence to suggest the fire jumped approximately 1½ miles?---That was purely what I had been told by the officers on the scene. I did not inspect the area.

You say that you contacted Major Clarke of the Army S.A.S. unit when you got to Mr. Beale's property. How many men did he have under him?---I think 30.

You say you were not able to obtain any clear picture of what brigade members or volunteers were doing or of any plans for the control of the fire. Had any headquarters been set up?---I think there was a fire headquarters at Beale's property, but there did not appear to be any individual control in combating the fire.

It was more or less a depot of men and materials?---Yes.

You say that Mr. Pickett returned to his property and decided to use resting personnel to burn back around his eastern boundary. What was the weather at that time, and where were the winds coming from?---I cannot tell you what was the forecast, but it was fairly warm, and the winds, which were more easterly than anything else, were quite fresh.

He was burning back from the winds away from his boundary. You referred to a certain gentleman who threatened the fire control officers, and that as a result of his threats they did not set alight the back burning of his property, but went on to somebody else's property?---It was still on his own property, but instead of being on the flat we burnt back on his property from rough country.

Did he agree to that?---Only under pressure.

Was the back burn successful?---Quite successful.

It you had burnt back on the flat you would have been unfortunate?---Yes, it would have been much easier and quicker; although the back burn did hold, there was no guarantee when we put it through that we would not have had to revert to our original plan of burning.

Was any action taken on his threat to the fire control officers?---No.

Under the heading of "General" you said that although this fire covered a considerable area and had been burning for some time, there did not appear to have been much work done by farmers in the area to contain or prevent the spread of the fire. Do you mean the farmers had not done much work up to the time you got there, or that they had not done much work prior to the commencement of the fire?---There did not appear to be any overall plan arrived at or considered to deal with the fire. That was my main concern, once the fire started.

You say in your evidence that it is possible the New Year outbreak could have been considerably reduced if the Army Avon Valley Training Area had been cleaned up, as had been planned and explained to Army personnel during the previous inspections of this area. Who did the explaining on those previous inspections and with whom is the planning worked out?---A Forests Department officer (Mr. Gorringe) and I, in the first instance, went over the whole area with the Army personnel. We discussed the general nature of what we thought should be done, in particular regarding the impact area where their shells and mortars landed. We did suggest a bulldozer break to be put around that area and then at some opportune time the whole area to be protective-burnt, at which both Mr. Gorringe and I offered to assist and advise on the spot.

After a further inspection and the bulldozed break had been put down in the impact area, Mr. Milesi of the Forests Department, Mr. Gorringe, and myself, together with our Northern warden and a number of Army personnel carried out an inspection.

You say it is possible that the outbreak could have been considerably reduced. Does that suggest that the fire broke out on that land or that it passed through?---It passed through.

Had any of the action been taken that you recommended?---Only so far as the bulldozed break was concerned.

You say you do not think the men and equipment were used to the best advantage during the 2nd January, mainly because there was little or no communications, and contact was very difficult. That again comes back to the fact that they had no one in charge of the whole area of the fire, I take it?---Yes. There were no communications and the country is very rugged. It is as much as one can do to walk through it, let alone with equipment, and it is very difficult to handle.

You say local authorities should order and enforce fire breaks and remove hazards and consider the purchase of suitable equipment. Do you know if they have ordered any firebreak or the removal of hazards?---There is no firebreak order issued by that road board for the construction of firebreaks. I understand it is left purely to the fire control officers to ask for firebreaks to be provided where they consider them necessary but no order is actually issued by the local authority.

Nor for the removal of hazards?---No.

And what about the purchase of equipment? You say they should consider the purchase of some. Have they as an authority any equipment at all?---The only equipment is a truck with a 600-gallon water tank; but as far as I am aware they have no actual power equipment for pumping or any equipment of that nature.

But some of the private owners have some, I suppose?---They have small equipment, yes.

And as far as you know there is no protective burning time in the district at all or the local authority does not order it to be done?---There has been a lot carried out in the district but some of this particular country burnt by this fire I am given to understand had not been burnt for 16 years and quite a lot of it, if not all, was private property.

Just to refresh my memory, can a local authority order controlled burning to take place?---They can order the removal of hazards.

When travelling through the country I saw some heavy accumulation of debris on the side of the road as a result of the operations of the Postmaster General's Department and the S.E.C. Can you tell me what happens to that? Do the authorities responsible for putting it on the ground, destroy it, or does the local authority order its destruction? Sometimes it is pushed on to private property, it seems to me?---Sometimes it is pushed on to private property and destroyed by the owner of such property which is a good way. In many cases I believe it is removed by the local authorities themselves. The Postmaster General's Department does do a lot of burning under its phone lines.

But they do not remove the hazard which is created by the clearing prior to the construction of the lines?---Of that I am not too sure.

What about the S.E.C.? Do you have any difficulty with them?---Not that I am aware of. I understand that the Bush Fires Board does take the matter up with the Postmaster General's Department and the S.E.C. if it receives any complaints from country local authorities, and I believe the co-operation is usually fairly good.

Going on to the Lesmurdie-Kalamunda fire, you say you noticed a fire burning in the hills. That was purely a casual observation, was it? You did not receive any information about it?---None at all, Sir.

Who is Mr. Poole whom you say was able to pinpoint the location of the fire?---He is acting assistant secretary of the Bush Fires Board at present.

How was he able to pinpoint it? By phone inquiry?---No. From his office in Bennett Street, East Perth, he has a very good view of all the hills. I was at home preparing to go to a country function, and I could see smoke but could not pinpoint the fire.

You say that near gale force winds were blowing and the fire travelled rapidly. What was the weather like apart from that? Extremely hot?---Yes, very hot.

You say you joined a group of forestry and other volunteers in an endeavour to save two houses but that unfortunately both were lost. Were conditions surrounding those houses unprotected?---Practically so, Sir. One that I did get fairly close to admittedly was an old house and I believe unoccupied, but there was grass growing right up to the verandah of it.

And the other house?---It was occupied but I do not know of any protection that had taken place.

While on that subject, have you any ideas you would like to bring forward with regard to how the protection of houses and buildings generally could be improved other than by clearing around them?---Not at this stage, Sir, no.

There is another matter which this Commission has to consider, and that is the protection of life. Apart from the protective burning which everyone is recommending and which is carried out to a great extent, are there any other suggestions you would like to bring forward which might assist in the protection of life?---No. But I would like to raise the point that on two occasions we have had the greatest difficulty in getting people to leave their properties when they were in direct danger. In this Lesmurdie-Kalamunda fire a lady had to be forcibly removed from her house which was almost totally destroyed in two minutes. In a later fire the police had to arrest a couple who had been in danger, in order that they might be removed from their property. Also in

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one of the fires in the South the police had to take similar action to have a lady removed from a house in similar danger.

I do not want you to answer this unless you have considered it, but do you think there is any benefit to be gained from giving fire control officers or people like that power to forcibly remove people without legal risk?---I would like to consider that first, Sir.

You say that as far as the Lesmurdie fire was concerned Fire-Control Officer Heslop and yourself worked together to bring it under control. You had other men with you, I take it?---Oh, yes, Sir.

The same thing occurred again at Wattle Grove. There were some houses lost, I take it, although you did not say so?---No. We saved all the houses in the Wattle Grove area.

Did you see anything there which might indicate why some houses were saved when they would not otherwise have been saved?---In the Wattle Grove fire it was certainly because we were on the job and at that stage we had got a little bit in front of the fire and were prepared to meet it when it arrived rather than when it was at the houses.

So it never really got up to the house?---No.

You say considerable trouble was experienced with sightseers and later on you made recommendations as to how to deal with this problem. I take it that fire control officers have no authority to stop unauthorised people from entering the areas?---Yes. A fire control officer has power to close a street or direct its closure, but this was not done on this particular occasion.

You say that at 2.30 a.m. it was considered safe to let the Armadale brigade return home, but that at 2.45 the fire broke away again from earlier back-burning. Was that a minor thing which resulted from no one being near the spot?---Yes.

What time did you leave the area?---Towards 3 o'clock in the morning.

You say that the lack of communications to direct operations and maintain control was again very evident. Too much time was lost running back and forth. What causes the running back and forth? To bring the messages?---You have to tie in between various groups. You have to decide to do one thing and you have to inform the other group what action you are going to take. You have to let them know all the time. They may have commenced to do something else which would not tie in with the plan you had formulated.

By lack of communication you are referring to wireless communication - with runners. You are making a comparison?---Yes.

You think that wireless communication is essential to efficient work?---Absolutely essential.

When you say that all buildings must have a greater degree of protection, particularly in the rural areas, you mean clearing around them?---Yes. We find, as we go around all these fires, a large number of buildings which have their doors and windows left open, and the people have gone to help fight the fire. If they took the precaution of closing doors and windows it would help. Otherwise we have to do it, or the fire fighters.

Or the fire does it?---Yes.

You say that householders should be forced to remain at or return home. Have you any suggestions as to how they can be forced?---It is a difficult one. I object to outside people being called to assist when people in the fire area have gone to work. The people that come from other districts have to work too and they should first be allowed to continue on with their employment rather than let the people in the fire area go to work.

Do you have any idea as to how you can force people to do it?---No.

It is rather difficult because there are different reasons for a person having to leave his home; it might be health or important business?---Yes.

Gidgegannup: You say that at approximately 3.30 a.m. "I was notified by Mr. Lonnie that a serious fire was burning in the Gidgegannup area." Can you tell me the date of that?---The 2nd of March.

Is that the same day as you got home from this other fire?---Yes. I had just arrived home, and there were three telephone calls waiting for me.

You say you rang central police station, but that the information received was misleading and confusing. Later, you got another report which apparently came from Sergeant Brown and did not throw any light on the situation. What was the difficulty?---There was no clear picture as to where the fire was or what its boundaries were. From the information given to me I was quite certain that the fire had already crossed Red Hill Road, but such was not the case. There was no definite boundary given or available to me as to where the fire was, or what damage, or personnel and equipment were actually there.

Would you expect the police necessarily to have that information? Is it one of their functions to act as a centre for receiving information of that sort and to draw up a picture?---Not necessarily; but they had been there, I understood, all day and I had hoped to get some sort of picture from them.

You say, later on, that Mr. Smith agreed that Mr. Mullumby, Mundaring Forests Department, should take charge of the fire. Mr. Smith is chairman of the Bush Fires Board?---Yes.

Is that the authorisation he gave to Mr. Mullumby and he has the power?---The Minister has the power.

To authorise anybody to take charge of the fire?---During one of the conversations with Mr. Lonnie he put forward the suggestion that it would be a good idea for somebody to be in overall charge of the fire, to which I agreed. I understand that Mr. Lonnie rang the Minister for Lands and I further understand that the Minister put Mr. Smith in charge of the fire.

THE COMMISSIONER: He was the man authorised. I see.

THE WITNESS: Mr. Smith deputised his authority to Mr. Mullumby.

BY THE COMMISSIONER: That could be done under the Act?---Yes.

And operate from Inspector Croker's office and for Warden Straker to report to Inspector Croker. How does that operate - Mr. Mullumby being in charge of the fire?---It could be an embarrassing question.

I think you can take it this way: As far as my opinions are concerned, any tactical move which a man makes to control a fire can be right or wrong according to what happens, and I do not wish to ask you any questions that might embarrass a particular individual. It is more the actual operation of putting a man in charge of the whole of the fire. Do you think that is a satisfactory move at any time?---The idea of putting someone in overall control of the fire is a very good idea. I fully agree with it.

I think you can say this: That you are not altogether happy with what happened on that occasion?---Not particularly.

I will not press it any further. Messrs. Wallace and Barrett flew over the fire. Can you give me any indication of the plane they used?---A Royal Aero Club Cessna.

And, later on, yourself and Warden Straker flew over the fire. Did you use the same plane ?---The same plane and pilot.

Are you satisfied that is a useful method of reconnaissance?---It is useful, but it would take some time to gain a little bit of knowledge or training in plotting a fire from the air on to our existing maps. Both Warden Straker and myself found that we still had our pencil in mid air when we were well past the spot which we wanted to jot down. It would take training, but it would be most useful.

Had you done much flying before?---No.

That would make it particularly difficult?---Yes.

I can appreciate that. Even if you had done a lot of flying, it is an operation that requires a bit of experience to plot from the air?---I have seen some of Mr. Barrett's plottings and if I could get pictures as good as some of his I would be very, very happy.

You say that Mr. Sutherland arrived at fire headquarters during the afternoon. As planned, a back burn along Red Hill Road, as far east as O'Brien's Road, was commenced at approximately 5.30 p.m. What were the weather conditions?---Still very high, and quite a strong east to north-east wind.

Which direction was this back burn; against the wind?---Yes.

Who was responsible for lighting that?---In the first instance the fire control officer from Herne Hill area - Fire Control Officer Steel.

Who decided where the back burn should go?---It was decided between Warden Straker, Fire Control Officer Steel, and a group of other officers from different districts.

You mention somewhere here that messages from a police control car were not very satisfactory. Later on a motor cycle patrol was quite good. That was a police motor cycle patrol?---Yes.

Do you know what was responsible for the difference in the value of the two operations?---It is a bit hard to say. We use the patrol cars for the re-laying of the messages and at times when we did have two cars, we would send one off to investigate a reported outbreak, or some such, and get a message direct through to the second car. On one particular instance an outbreak was reported and I asked the officer in charge of the patrol car to investigate and report back to the second car where I was stationed.

In actual fact, we got no report, and it was four hours later that we found the patrol car and its occupants. We did not know, at that stage, whether a tree had fallen on them or whether they had got lost, or where they were. No report was received back.

What had happened to them?---We never did actually find out. When we did find them they were having lunch.

These motor cycle patrolmen were giving verbal messages?---Yes. They were mostly watching for spot fires along the main road, and they had more or less defined boundaries in regard to how far to go before they came back again.

It was one of those occasions when couriers were more effective than wireless?---Yes.

You say that late on Friday afternoon a fire broke out on the reserve road area?---Yes.

You say that when you returned to the fire at 5 a.m. it was decided to hand all future control and prevention measures back to the Swan-Guildford Road Board. But actually they had never surrendered their control, had they?---No, but an officer had been appointed to take overall control of the fire, and actually the Swan-Guildford Road Board were not directing the control of it.

Was Mr. Mullumby still there at that time?---I am not sure whether he was there on the Saturday morning or not.

Then you make some recommendations: That the local authority order and enforce fire breaks -- (i) around all cleared land or land used for pasture. What sort of fire break are you thinking of: What width and nature of construction?---Preferably cultivated, ploughed or scarified, up to 10ft. or approximately 10ft. in width.

Then you go on and say, "(ii) around all buildings." Are you applying the same width right through?---We like to see a fire break approximately five chains away from a building and completely encircling it and all inflamable material within the five chains, removed.

Are you thinking that the 10ft. firebreak is only a site from which to burn back or to stop a very small fire, whereas in the case of a house you want to break five chains away to stop it getting any closer to the house?---That is so. The 10ft. firebreak is normally used to start a back burn into a fire, although such breaks do stop a lot of fires, particularly on the flank. But around a building, the five chains is to prevent a fire getting into the building; and also, should the building be on fire, to prevent it getting out into the pasture lands.

Then in item (iii) you say, "around the external boundary of all bush or uncleared land." What were you thinking of there as a typical kind of firebreak?---A lot of properties are held, probably, on a speculation basis and it is very difficult to get the owners to do much. They are never there when a fire is on; or they are not usually there when a fire is on to assist. That is included with the idea of assisting the fire control officers so that they will know the property has a break around its boundary, even though it may be in bush, where they can burn back from perhaps to save going back into the pasture country.

Your next recommendation is that encouragement be given to carrying out an extensive protective burning programme. What do you visualise by encouragement?---The road board could circularise all its officers and communicate with all the ratepayers in the district and advise them what can be done and where they can seek advice and information.

I thought you might have meant some other kind of encouragement: financial assistance in some way. Thirdly, you recommend that the local authority consider the purchase of a suitable heavy-duty unit. Without making it a free advertisement for a particular make, can you describe the type of unit you think suitable for this purpose?---Preferably a 4 x 4 -- a 4 wheel drive vehicle with a 400 to 600 gallon tank with a reasonably powered pressure pump.

You bring under appreciation the action of certain people, and there is one body you did not mention before -- the Salvation Army. Did they take an active part in helping to provide refreshments?---In the early stages of it, we were offered assistance to provide food for up to 200, by the Salvation Army. This had already been arranged through the Red Cross, but the Salvation Army did take over at night time and provide coffee and biscuits right through the night.

You also mention Bell Bros. for the use of machinery. Are they manufacturers of machinery?---They are earth moving contractors.

There is another report by you on the Denmark fire, in conjunction with Warden Straker. I think it is your report. It is unsigned?---Is it the report headed "Report by Senior Warden Hale and Warden Straker"?

Yes?---It was actually compiled by Warden Straker, although I was at this fire some of the time with him.

It would probably be better for him to give it in its entirety. If there is any comment you wish to make about it, I would be quite happy to receive it?---One point that could be mentioned is the apathy on the part of a lot of people in the Denmark area. When I was asked to go down there I was under the impression that the situation was serious. I arrived there and the first thing that took my notice was the large number of people who were gathered at certain places in the town, and nothing was being done. In actual fact, when I arrived at the police station, which was to be the headquarters, there were only the Road Board Secretary, the police officers, and Warden Straker there. There was nobody else who seemed interested or concerned at what was going on.

What were the conditions like at that time? Were they severe?---It had started to cool down then.

I think it is recognised that in some cases people are not very worried if a fire does spread when certain weather or local conditions obtain. I was wondering whether that was one of those cases, or whether it was a

fire that should have been stamped out as soon as possible?---There were a number of fires, not only one, in the Denmark district, burning at the same time. There was one right in the town, or on the outskirts of the town, and there were several others further to the west.

You would not have had any doubt in your mind that they should have been attended to immediately?---That is so.

There are one or two things that Mr. Sutherland mentioned that you could inform me on. Did you make notes of them?---One, I think, was the petrol tanker fleet for water carting.

That is right?---I do not know of the actual channel through which these vehicles were obtained, except that Mr. Lonnie of the Emergency committee did organise it. I understand it was arranged through the local manager of the Shell Oil Company, although there were more companies represented than that particular one. I think all the companies were represented.

I am led to believe it is some arrangement between the oil companies to assist in this way.

The other was a matter of the authorised officer who was put in charge of the Gidgegannup fire?---Yes.

BY MR. McARTHUR: I was wondering whether your board has any maps of the Gidgegannup fire area which were used during the fire?---I am not sure whether they are available, but I will check this matter for you.

I cannot speak for the Commissioner, but to me it is very confusing during a description of the fires, not to be able to trace the areas on a map in order to follow the various roads and places you describe. It does not mean very much unless a map can be followed?---We knew many of the reference points, but its speed had us tricked on this occasion.

(The witness retired).

Sitting suspended for lunch.

DONALD WILLIAM RUSSELL STEWART,
Forests Department Officer,
residing at 4 Bellevue Avenue,
Dalkeith, sworn and examined:

BY THE COMMISSIONER: You have a prepared statement. Will you proceed to read it?---This is a statement on the origin and spread of fires, and action taken in the Dwellingup forest division from Thursday, the 19th January, to Wednesday, the 25th January, 1961.

Is this evidence of your own knowledge, or does it contain hearsay evidence and statements which you obtained from other people?---That will be covered by the next paragraph in the statement. It reads as follows:--

N.B. (1) A separate statement on "Fire Weather" during the above period will be presented.

(2) All records both of fire weather at Dwellingup weather station, and all details or the recent fires were lost when the Divisional Office was destroyed by fire on the evening of Tuesday, 24th January.

The Conservator instructed two senior officers, Regional Inspector Moore and myself to make a thorough investigation, and report on the circumstances of the fires leading up to the disaster of Dwellingup. The information hereunder presented was obtained by interviewing all officers concerned with the Dwellingup fires, and from the Log Book of Mt. Wells Fire Lookout Tower.

I have no direct knowledge of this. This is purely information obtained from interviews with a large number of officers and other persons connected with the department.

I presume you have seen the scene of the fire?---Yes.

I would like it to be made plain whether this is personal knowledge or hearsay evidence?---My statement continues chronologically as follows:-

(1) Thursday, 19th January: Following a long period of dry weather and some five consecutive days of very high fire hazard, a rain and lightning storm occurred between 5.30 p.m. and 6 p.m. between the towers of Mt. Solus and Mt. Wells, some 20 miles east and north-east of Dwellingup. Forecast for the day had been "dangerous". About 6 p.m. the Divisional Officer in charge (Assistant Divisional Forests officer Campbell) instructed his overseers to alert their men so as to be ready to attend any outbreaks of fire from lightning strikes.

Lightning put out of action the telephone in the tower-man's hut at Mt. Wells. After the storm the towerman logged six fires and reported them by telephone from the tower at 6.30 p.m. as under.

(i) Bearing 288¼°, Kennedy Compartment 11.

(ii) Bearing 267°, Wells Compartment 6.

(iii) Bearing 235°, Wells Compartment 7.

(iv) Bearing 234°, Wells Compartment 7.

(v) Bearing 29½°, Location 526, near the Albany Road.

(vi) Bearing 324°, Duncans, Compartment 6, west of the road to Wells Tower.

Gangs were despatched from Dwellingup, to attend and suppress five of these outbreaks, while fire No. 5 was suppressed by a gang from Gleneagle in the adjoining Division to the North.

A strike had also been reported in Pindalup in Compartment 3, but nothing could be located there and it is believed that this might have been confused with one of the other strikes which was on the same bearing.

Gangs returned to Dwellingup between 1 a.m. and 2 a.m. on Friday, 20th, reporting in each case the fire was under control but would require patrol and in some cases, mopping up in the morning.

(2) Friday, 20th January:

At 0515 hours, Mt. Wells towerman logged fire No. 7 at 334° in Boonerring Block (CK74/2). Apparently this fire struck the night before but did not show up until the following morning. At approximately 0715 hours a gang was despatched to fire No.7 and further gangs were despatched for final mopping up of the fires attended the previous night. By 1100 hours the series of fires near Mt. Wells was reported to be under complete control.

At 0900 hours fire No. 8 was reported at 314° in the North West of Cameron Block and was immediately attended by four men.

At 1240 hours the 9th fire was reported at 342° in Boonerring Block. Five men were despatched, being the last gang from Dwellingup Headquarters, and were joined about 1430 hours by a further gang from the fire in Wells compartment 7 which was then considered safe. It was found that this fire, No. 9, originated as a series of about 12 lightning strikes at intervals of 1 - 1½ chains apart in a straight line.

At 1350 hours a tenth fire was reported in Torrens Block at a bearing of 312½ from Mt. Wells. I will call this fire No.10. One officer and one man, being all the personnel remaining, were despatched in a jeep for reconnaissance and reported back about 1450 hours (by telephone) that there were numerous small fires 'spotting' from the main fire and all available men and equipment would be required. The fire was at the northern edge of some dirty swamp country. The temperature was then by this time over 100° and there was a fresh East-South-east wind.

A.D.F.O. Campbell called for assistance from both Harvey and Mundaring Weir Divisions and rank Head Office to report the position generally, and inform the Fire Control superintendent that further assistance would be needed if any of the fires got out of hand. Although both Harvey and Mundaring Weir Divisions also had some fires from lightning strikes, they each sent men and equipment to assist Dwellingup.

Mr. Campbell again rang Perth in the evening and informed the Fire Control Superintendent (Mr. Milesi) that the Torrens fire, No.10, was completely out of hand and more assistance would be required. The Fire Control Superintendent then arranged for additional men and equipment from Wanneroo and Collie for himself proceeded to Dwellingup, arriving on Saturday, 21st, at 0100 hours.

(3) Saturday, 21st January:

On arrival, the fire Control Superintendent found the position to be most disturbing because of the following factors:-

(i) the Torrens fire, No.10, had spread rapidly in a west-north-west direction for some five miles with a spot fire ahead at Cronin Brook some six miles from the point of origin of the main fire. This had travelled a further 1½ miles in the same general direction.

(ii) About 2300 hours on the 20th -- on the Friday night -- the wind changed to north-east, causing both the main fire and the spot fire to move in a south-west direction, on a broad face.

(iii) Two of the earlier fires -- two of the first nine fires, namely Nos.8 and 9 -- still required the attention of a considerable number of men.

(iv) There had been a second lightning storm between 9 and 10 p.m. and further lightning fires had been reported from the towers in Urrbrae Blocks (Nos.11 and 13) -- they were picked up at night by the glow from fires 11 and 13 -- with a probability of other fires in the locality. This was verified later this day, as fires 14 to 18 were located throughout the morning. There was a series of strikes throughout this part of the country during Friday night. There may have been additional fires overrun by Fire No. 10. The fires reported here do not necessarily include all the lightning strikes which may have set fire to vegetation.

By dawn, the most north-westerly point of the fire was entering private property along the face of the Darling Scarp, east of North Dandalup, somewhere in the vicinity of Location 540; while at 4 a.m. a tongue of fire had come over the hills and reached the South Dandalup River at Fairbridge Farm School near the east boundary of Location A16.

It was subsequently believed that this fire No. 12 originated in Whittaker Compartment 6 from a lightning strike the previous evening. Some counterfiring was then done to check these fireheads, by settlers at North Dandalup and on the South Dandalup Brook.

From reports of various officers during the night, it appeared that there were also fresh fires in Wilson, White and O'Neil blocks. They were some fires that were located the next morning. The block names are shown on the Forests Department Litho Gleneagle 80 and Dwellingup 80. By 1135 hours the visibility was less than 5 miles from the tower and the position of the various fires themselves was not known at the control centre.

At 0900 hours, fire No. 14 was reported from Teesdale tower in Marrinup block, but it was not located in the field until 1100 hours. At 1130, fire No. 15 was found on location A7 near the edge of the scarp.

This fresh crop of lightning fires outflanked and nullified all the work done on the southern flank of the Torrens fire during the previous night. There had been a gang working on the southern flank and the northern flank, and any work they had done around there was nullified by these further strikes to the south. During the morning, therefore, all gangs were recalled to Dwellingup for regrouping and an amended plan of attack. Early on Saturday afternoon, all available personnel (other than those being rested) were placed at the Marrinup fire (No. 14) which was some 4 miles to the north-west of Dwellingup. To the west of it was a belt of recently "controlled burnt" country with light litter, so that the main effort was concentrated along the eastern face of this fire and it was held by counter firing along the "Back Huntly Road".

On the afternoon of Saturday 21st, considerable reconnaissance was done to determine the position of running fires, as the heavy smoke pall prevented the towers from giving this information. The general position then was that apart from one of the main Wells fires which had broken out again and could be treated as a separate unit, there was an extensive area with a series of running fires in it, many of which had linked up, from Marrinup block in the south-west to Boonering in the north-east and Myara in the north-west, i.e. an area about 16 miles from east to west and 14 miles from north to south.

The general strategy envisaged the holding of the fire along the North-east road from Dwellingup to the Albany Road, by backburning at night, but it was found that a spot fire had already jumped this road, forming a salient in Scott Block which had to be contained. In addition to the salient in Scott Block, the fires had already crossed the road, forming a salient in O'Neil Block which was also to be contained by backburning. The southern and eastern faces were regarded as critical with the prevailing winds at that time from the north-east and north. The northern face, it was felt, could be held by the Serpentine Dam clearing and by gangs from Gleneagle working east of this clearing to the North East Road.

(4) Sunday, 22nd January.

At 0900 hours a reconnaissance was made of the north and north-western boundary in Myara Block as the position of the fire in this locality up to this time had been obscure. It was arranged that a group of men under Fire Control Officer Ladhams from Serpentine would look after this sector.

At 1530 hours, D.F.O. Beggs arrived as a relief officer and took over from A.D.F.O. Campbell, after being briefed on the overall position and reaching a decision on plans of attack.

The major fire was divided into five sectors, each in charge of a sector fire boss and regular crew replacements were planned for each sector.

During the day, most fronts were held as there had been a slight increase in the humidity and a drop in wind strength, but conditions were still dangerous. During the night of the 22nd-23rd there were a number of small breakaways from sectors which had been held during the day. A considerable mileage of backfiring was done from existing roads during the night. In other words, there was no major movement of the fire during the night.

(5) Monday, 23rd January:

On Monday, 23rd, it was considered that good progress had been made. Mopping up and control were continued and by 1800 hours the position was reasonably satisfactory as no major breakaway had occurred.

All fronts were being held and provided reasonable weather continued it was felt that complete control might be achieved within the next few days. A very long perimeter was being precariously held, and although 200 men had been committed, this was less than two men per mile of perimeter. That being on the assumption that only 50 per cent. of the men were present at any one time, as they would be spelled at 12-hour shifts, the changes being made at midday and midnight.

(6) Tuesday, 24th January:

At dawn it was reported that a further fire had been discovered during the night, being apparently a lightning strike approximately 3½ miles east-south-east of Mt. Solus, which had remained undiscovered under the heavy smoke pall. This fire--No. 19--thus outflanked much of the work done on the north-east face. The "Wells" fire had already broken out again with a fresh south-east wind overnight. This fire had been troublesome with repeated outbreaks and was requiring the attention of many men and their equipment.

During the morning, further back-burning was commenced on the north-west side of the north-eastern road to contain the new fire No. 19. (n.b. the north-eastern road is the road from Dwellingup to the Albany road.) The forecast was "dangerous" and north to north-east winds were expected. Between 11 and 1130 hours the wind freshened from the north and the back fire broke across the road. There were also further breakaways with the freshening north and north-west winds. There were quite a number of spots where it was just blowing away. In view of the dangerous forecast and expected strong north-west winds, all personnel were instructed to report back to Dwellingup to get their men on to burnt ground to avoid being trapped by fresh breakaways. It was intended to re-form and re-deploy personnel when weather conditions eased. At approximately 1300 hours there was a breakaway from the eastern face of the Marrinup fire which had been held for two days. A strong north-westerly drove this in a tongue to a point south of Banksiadale and it spotted ahead into Nowra Compartment 4.

An officer--Forrester Rutherford--and two more units were dispatched to Banksiadale for the protection of the township and to ensure that there was no panic backburning at that stage.

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At the "Wells" fire Ashcroft, who was the officer in charge of the group out there, with a large gang of men, requested and was granted permission to remain there as he felt that he could hold the fire and in any case his men would be on safe ground. All other gangs were instructed to report at Dwellingup at 1800 hours.

By 1830 hours with an extensive face of fire only 2½ miles to the North, it was apparent that Holyoake would be in grave danger and it was decided to evacuate the town to Dwellingup where forces were concentrated for defence. Settlers on farms throughout the locality were advised by telephone and couriers, to evacuate their farms and come into Dwellingup as a large uncontrolled fire was bearing down from the North and nothing further could be done to halt its progress. Police were advised at Pinjarra and asked to inform settlers west of Dwellingup. Fire towers at Teesdale and Mt. Wells were evacuated.

All available forces were dispersed for defence with heavy duty pumper units around the northern perimeter of the town, light duty gang trucks in the main settlement, plus men with knapsack sprays around the houses to suppress any small fires that might spot from the flying embers. At this time it was considered that the fire would sweep past the town and possibly some buildings on the outskirts might be lost. No one envisaged the subsequent developments (with gale-force winds), in view of the fact that considerable controlled burning had been done in the forest north of the town in the past two years.

The defence units were manned mainly by personnel from other divisions, leaving the local men free to give particular attention to their own homes and families.

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10/5/61.

About 1830 hours the wind freshened from the north and by 2020 hours was blowing at Dwellingup at gale force, described by many as "stronger than ever previously experienced at Dwellingup." Sheets or iron were lifted from the storeroom and verandah roofs. Burning debris showered over the town before the main fire itself reached the township, and started innumerable spot fires throughout the town and in the forest to the south of the town. Buildings ignited at widely separated points.

I might add that the first house to go up was about 300 yards inside the town on the edge of the recreation ground. From descriptions given of the fire, houses here and there went up with so many spot fires starting. My statement continues as follows: -

The blast lasted for 1½ - 2 hours after which it gradually abated. There was a further surge about midnight.

When it was apparent what was happening, steps were taken by the men in charge of each sector, to get as many women, and children as possible out of the houses and into open spaces, (recreation ground, school ground and cleared parking area in front of the hotel) where they could be clear of burning debris and sprayed with water to prevent the ignition of clothing by flying embers. Doors and windows were shut, inflammable material removed from verandahs and groups of men putting out numerous small fires with light duty units and knapsack sprays were successful in saving a very large number of houses. It is to the great credit of all personnel concerned, that through the terrifying experience of the night of 24th January, there was an absence of panic, and not a single casualty, despite the very substantial loss of property, particularly buildings and motor vehicles.

By 2230 hours the main force of the fire had passed Dwellingup and it was driving southward to the Murray River. It crossed the river, and Nanga Brook Mill was burned out after midnight. (Personnel had been evacuated to Waroona.)

Meanwhile, Harvey and Waroona had been alerted, Hoffman Mill evacuated as a precautionary measure, and co-ordinated action arranged between the Forests Department operating from Harvey and the Waroona Road Board and settlers.

(7) Wednesday, 25th January:

Somewhat milder weather on Wednesday, 25th enabled the fire to be checked to the south and held by counter firing along prepared roads and trails in country where controlled burning over extensive areas was of relatively recent date. Some rain fell on the night of Wednesday, 25th. A tremendous perimeter remained to be mopped up, but from the evening of the 25th there was no major outbreak or serious concern, and the whole perimeter was gradually brought under control during the ensuing week.

COMMMUNICATIONS: Following the electrical storms on the nights of Thursday, 19th, and Friday, 20th, radio transmission was extremely poor with a lot of static interference. It appears that radio transmission conditions were at their worst when they are most needed, i.e. in times of dangerous fire weather.

On the night of the 19th, when fires were first attacked, the field gangs were unable to communicate with Headquarters by mobile radio although they were able to communicate with Harvey divisional office which transmitted telephone messages to Dwellingup. Radio communication was also most difficult and unsatisfactory on the 20th and 21st January, but from the 22nd onwards, it improved and was quite satisfactory.

Departmental telephone lines were effective until cut by fire. A line north to Mt. Solus lookout went out of action when a fire broke away on the afternoon of Saturday 21st, some nine miles north of Dwellingup. To the east, the Waraming line operated until it was finally overwhelmed by breakaway fires on the afternoon of Tuesday, 24th. Communications were also quite inadequate between Forests Department and the various bush fire brigades which operated between Serpentine and Pinjarra, west of the Darling Scarp.

Although for more than 20 years, the Forests Department has maintained a burnt buffer between private property boundary and the main forest belt, a mile or more in width, this was burnt in irregular sections over a rotation of three to four years. Under the prevailing weather conditions, at lease two points of fire broke through this belt, one near North Dandalup and one on the South Dandalup Brook. Settlers below the Scarp undertook back burning against these encroachments and subsequently back burnt for the full distance from a point three miles south of Serpentine in the north, to the Murray River in the south.

Will you describe in detail the back burning on the escarpment?--I shall have to defer my answer until I have gone through a number of reports. We have the information covering most of the position, but it might not be complete. I shall present this information to you. My statement continues --

The lack of communications was such that there was little co-operation or liaison between the various bushfire brigades or between those brigades and the Forests Department.

South of the Murray River, where there was adequate warning in advance of the fire, excellent co-operation was achieved between the Forests Department and the settlers in the Waroona District. Firebreaks were prepared for back burning when the fire from Dwellingup crossed the Murray River and firm agreement was reached that no back firing would be undertaken without the approval of the Divisional Officer in charge at Harvey.

Will you also obtain for me the detailed information regarding the back burning south of the Murray River?--I shall include that information when I deal with the whole burning by the farming community of the Western flank of the fire.

Reference to maps:

The map submitted herewith is compiled from information obtained from the many field officers who assisted with the fire commencing a few days after the Dwellingup disaster. It indicates a daily and 6-hourly spread of fire, but much of the information is interpolated from the known points of the fire at known times. It is therefore to some extent, diagrammatic, although it is believed to represent the position at any time, fairly accurately.

EXHIBIT EXHIBIT "F" Map showing Dwellingup. fires, 19th to 25th. January, 1961.

Additional information:

The subject matter presented is essentially a condensation in an attempt to present a brief but intelligible picture of the origin and development of fires.

A great deal of information is available on file for perusal if desired. This includes statements from or reports by some 24 forest officers, three bush fire control officers and two settlers, one mill manager and one fire-warden. Also extracts from Mt. Wells Tower log, fire weather data, lists of equipment and staff from other Divisions, and tabular statements showing the disposition of men and equipment at the various fires over the 6-day period 19th to 24th January.

Would you like that file presented as an exhibit, Sir?

We will come to that. We will go through and question you about some of the matters raised here. I have no comment to make on the first or second pages. On page 3 you refer to Mr. Beggs. Where did he come from?---He came from Manjimup.

And why did you bring him there?---We had officers coming from nearly all the southern divisions but he was of particular value in that he had been the divisional officer in charge at Dwellingup for the preceding three or four years and knew the country fairly intimately so that he was a very suitable person to take over from Mr. Campbell who had had more than 48 hours on the job and was pretty well run into the ground.

You say that on the 23rd of January all fronts were being held and provided reasonable weather continued it was felt that complete control might be achieved within the next few days. Then you go on to say that a very long perimeter was being precariously held and although two hundred men had been committed, this was less than two men per mile of perimeter because only 50 per cent. of the men were present at any one time.

Why did you not get any more help? Did you think that two men per mile were sufficient?---I do not think anyone believed that the resources were adequate. Everyone knew they were not. It was a question of where to get additional help and how to control it. They had among the men those who were fairly well equipped with bulldozers and power saws who did a tremendous amount of work in felling burning trees and extinguishing burning trees and logs. To bring in more unskilled men there would have been a disability rather than an advantage. If trained units could have been brought in it would have been a different matter; but it was quite a problem to feed, house, and handle the 200 odd men we had with the staff we had.

I appreciate that, but that is not the reason you did not bring in more men, because of the difficulty of feeding and housing them?---No, it was because of the difficulty of obtaining and handling suitable men.

Do you know if they tried to get more suitable men from outside?---No, I do not know of any attempt made. They had pretty well all the mill workers in the district out from Banksiadale, Nanga Brook, and Chadoora, and some men from Jarrahdale. More skilled men were brought from the Mundaring district and also from Collie; but unskilled and untrained men are liable to be a handicap rather than an advantage in a fire like that.

The fire was practically still at that stage?---It was practically stationary. It was held along the existing roads and tracks or along the bulldozed tracks linking them.

While I realise that they would be a handicap with a moving fire or one which was liable to move, I should imagine that they could be quite a help in controlling the fire and throwing burning material back into a fire, or have you found from your experience that this is not so?---My experience has been to the contrary. We would have to detach men to look after untrained men. One trained man could handle five or six untrained men,

and you lose the value of gangs and groups of good trained men.

They would only be patrolling the fire?---Patrolling and working on it.

Did you get any offers of men from outside?---At that stage, not that I know of, although I had a fair reservoir of men from Collie and they were most useful. That is where a lot of the additional men came from.

Do you know if any effort was made to get the Military?---I do not know. The Military had a small unit of Army personnel out on the Keysbrook flank which assisted the bush fire brigades in that locality with backburning; but it assisted them more in radio communications rather than on actual work on the fire face.

So would you say you do not know whether you could have got any more men?---No.

On page 4 under the heading of "Tuesday, 24th January", you say, "At dawn it was reported that a further fire had been discovered during the night, being apparently a lightening strike approximately 3½ miles east-south-east of Mount Solus, which had remained undiscovered under the heavy smoke pall. This fire -- No. 19 -- thus outflanked much of the work done on the north-east face. The "Wells" fire had already broken out again with a fresh south-east wind overnight". Could that fresh wind have been responsible for that fire which you have numbered 19?---

?---No, it was over too big an area.

In other words, they considered that the fire was such a size that it could not have started overnight?---Yes, they were pretty certain it was something which had been going on for a couple of days. It was so well back from the face that it had not been discovered. By the time it got closer they saw the glow of it -- about 2 a.m. in the morning.

What would have been its distance from the front of the fire?---An estimate of the origin determined it to be a mile and a quarter; but by the time it was seen it was probably about half a mile.

You do not consider a mile and a quarter as a possible distance for the fire to be thrown?---It would have had to be a south-westerly, a humid wind. You get less throwing than with northerlies. I am not saying it is impossible, but the general consensus of opinion is that it was a lightning fire which had been going for a couple of days.

You refer to a man called Ashcroft. Is he an officer of your department?---A former officer of our department. He left our department some years ago. He knew the Dwellingup division intimately and offered his services, and they were most welcome. He took charge of quite a large group of men, relieving other men.

Is he a fire control officer?---No. I think he is right out of fires and timber in his present business. He sells insurance, I think. It was a very good effort and he did an extremely good job.

At the top of page 5 you say that the Police were advised at Pinjarra of a large uncontrolled fire bearing down from the north, and they were asked to inform settlers west of Dwellingup. Do you know if that was done?---I believe so. The telephone exchange advised everyone they knew who was within the locality -- the exchange and the police.

That is one of the directions in which you find the Police very useful?---Yes.

In the next paragraph you say that "at this time it was considered that the fire would sweep past the town" -- Dwellingup -- "and possibly some buildings on the outskirts might be lost. No-one envisaged the subsequent developments (with gale force winds) in view of the fact that considerable controlled burning had been done in the forest north of the town in the past two years". Did you not have a forecast which gave you any indication of those winds?---No. You will get a full picture of that when Mr. Wallace gives evidence on the fire pattern over the 10-day period. Apparently, a small low pressure cell formed at the southern tip of a trough -- the main "low" was at Onslow -- and you have the hot dry winds going down this trough and the formation of this small cyclone at the southern end, which apparently moved inland. We got an additional cyclonic effect and very greatly increased wind velocity which was evident at the Perth Weather Bureau at 8 p.m., and Mr. Wallace will bring along the charts showing wind velocities and indicating high velocities attained at times. Unfortunately, the records at Dwellingup itself were lost. We have an indication of what happened and the weather map shows this closed cell moving across at that time.

You really do not know the exact force of the wind; it is estimated?---It is purely an estimate. I am quoting Mr. Wallace when I say that it is believed it exceeded 40 miles per hour for quite a period, with peaks up to 60 miles an hour.

You haven't any records to check, or whether this had been previously experienced?---No; those statements are taken from men who have been there for many years.

Can you tell me how many buildings and motor vehicles were lost in that fire?---I could, if I may refer to the file.

You may do so?---I think it was 89 motor vehicles lost. In Dwellingup itself 38 houses were destroyed; 53 houses remained. The total loss of houses in the district was approximately 130. That would include the old mill houses and cottages at Holyoake, and scattered farm houses and the old mill houses at Nanga Brook.

Some of those houses would not be occupied at the present day?---At the time of the fire?

Yes?---The great majority would have been occupied. Although the Holyoake mill was not operating there was still a large number of mill employees living there and working at the State Building Supplies mill at Dwellingup.

Did the evidence, or the experience obtained during the fire, give you any thoughts about what action might be taken to protect property in a similar occurrence?---From what I saw of it I would say that the evidence strongly bore out the information compiled by the C.S.I.R.O. following the burning of the township of Beaumaris in Victoria about 1943 or 1944. The C.S.I.R.O. made a close study following the loss of 80 or 90 houses there, and it did show that the method of construction played quite a part in it; also the cleanliness of the ground. Houses with debris near them or with inflammable material outside; houses with open eaves, hedges nearby, were burnt. The information indicated that it did not matter what it was built of: wood, bricks, or stone; it was the method of construction that was important, and the absence of inflammable material close to the house. Houses with lawns close to them, and open ground generally escaped.

D.W.R. STEWART,
10/5/61.

That was the conclusion from the Beaumaris study. At Dwellingup we found much the same thing with the buildings and houses, the very old ones particularly. Often the unpainted exposed weatherboard houses with possibly a lot of debris in the backyards, and old picket fences and firewood heaps and old hedges, were a menace. There is one clear example there. The reason the office was burnt was because a 30-year old hedge, about 12 ft. high, caught alight. Although it was at least 40 ft. from the office, the heat was so intense that the men who had been putting out the small fires at the office with the pack sprays could not stand the heat.

That was the Forests office?---Yes.

Did such things as the colour of the paint of the houses have any effect?---I saw no evidence of that, but a painted well maintained house seemed to stand it better than the unpainted house; and so did the newer houses where the timber was not weathered. For example, speaking particularly of the departmental buildings, in one row we lost six out of seven houses. They were all houses perhaps 30 years of age or more, and the one standing, although old, had recently been shifted there and the weatherboards were in pretty good condition. In the newer settlement area we had 35 houses and only one lost. They had relatively bare ground around them and more space between the houses, and no old hedges. It was in that area where most of the employees and their families were living. I think the people got all the doors and windows shut. That again came from the knowledge of what had happened at Beaumaris. The houses most commonly ignited from the inside. If the doors and windows were shut, it had a good chance of escape.

Were there any statements made to you that houses that could have had certain hazards easily removed, such as leaves in the gutter, formed a danger, and that those hazards could result in the destruction of houses?---

No statement was made to me to that effect, but any inflammable material like that will easily help a house to go.

You reached the time when Harvey and Waroona had been alerted and Hoffman Mill vacated as a precautionary measure, etc. You say the Nanga Brook mill was burnt down after midnight on the 24th. That was the bad day. That was the day when the main damage was done?---Yes, on the night of the 24th.

Did you say that the back fire did not in all cases reach the front fire before the fire died down itself?---No, I did not say that.

Do you know if that is the case?---It was on the western flank. There were places where the back burning from the escarpment did not reach the actual fire owing to encountering controlled burnt country in between, and partly due to the fact that rain fell.

What time did it rain?---On the evening of Wednesday, the 25th. In the more northern areas it would be on account of the prior burning of the country that they did not link up. But in the southern strip it could be on account of the rain. You will see from that map that even on the 25th there was a very big area burnt. But that was largely stopped by rain falling that night. It was really rain that made the difference. It enabled the men to get around and tidy it up.

D.W.R. STEWART,

Gff/Bly. 10/5/61.

Can you say that the whole western edge of the fire marked the edge of the back burning from the western side ?-- Yes, that was a continuous line of back burning.

Was that lit entirely by the landowners or their representatives on that side, or did the Forests Department light some of it ?-- All our forces were concentrated to the south and the east, and that was done entirely by the bush fire brigades of the plains and the lower foothills.

When did you get a forecast indicating that rain would fall ?-- I think it was probably on Wednesday. There was evidence of a change coming in that night. There was certainly no forecast of rain during the progress of the fire.

Do you recall what the forecast indicated prior to the fire starting ?-- For six days the forecast was either severe or dangerous. I could give you the temperature and humidity readings for that period, but it would probably duplicate the evidence that Mr. Wallace will be giving you.

In referring to that back burning on the western side you say --

> Lack of communication was such that there was little co-operation or liaison between the various bush fire brigades or between those brigades and the Forests Department.

Can you tell me what efforts the Forests Department made to maintain liaison ?-- I think it is right to say that at that time it was not known when the first back burning occurred that there was any fire there. For instance, this fire reached the scarp before anyone in the forests service was aware of its existence. There was an effort made further south where they got in touch with the local bush fire control officer at Meelon and asked him not to light there. He agreed not to do so at that time, but just to the north of him another brigade had already lit, and his hand was forced to some extent, and he had to tie in with that.

Would you say without consulting him ? -- I do not know enough about it to say whether or not there was any consultation there. But his hand was forced and he had to light it; it was following that that the forest

officers attended there. But there was so much previously burnt ground north of the Pinjarra-Dwellingup Road that the fire was contained along the track from which they had lit.

The only way we can ascertain whether the Meelon brigade captain was asked by the man on his north would be to ask the Meelon captain himself?---I know initially he was not. I do not know for sure.

I do not want you to commit yourself to something you are not sure about?---We have spoken to some of these men and got some information from them, but it is not a complete picture. I think it would be very much better to take evidence from the persons who were concerned. I have a rather incomplete story.

Were there any instances where the Forests Department tried to co-operate with the land owners on the west?---Not with the land owners directly but with the Serpentine Bush Fire Brigade.

I meant with any of the people interested?---We had a very satisfactory relationship with the Serpentine brigade. Every officer was so fully engaged for the first two days that none was available to maintain contact on the western side. It was on the third day that reconnaissance was made out there and contact was started.

The statement has been made that communication had been so difficult that considerable confusion existed on the western side as to what was the position on top of the escarpment; that when they sought information they generally got the information from the Forests Department that the fire was being held. Apparently that was the case at certain times. When the fire broke out on the western side they were caught unawares?---From my inquiries I only found two instances where they telephoned the Forests Department to ascertain the position. One was from Mr. Salter, captain of the Meelon brigade. I think he telephoned on Friday night, but I cannot verify this without looking at his statement. He was told not to light the fire there as there was no immediate danger in that locality. The second occasion was a telephone call from Mr. Thorn of the North Dandalup brigade. That also was on the Friday night. I think he was told that the position was then in

hand. That was early on Friday evening before the fire had penetrated so far to the west. There might have been other telephone calls but I have no record of them.

BY MR. McARTHUR: I think you could perhaps explain the operations which took place to the north of Banksiadale which may have resulted in Banksiadale not being burnt out on the night of the 24th. I might also add that the colouring on the map in that particular area is incorrect?---I have not sufficient information to make that clear, Mr. McArthur. The action taken around Banksiadale that night I am not aware of. The only information I had is that the fire was held on the line which is shown on that map half a mile to the north of Banksiadale and proceeding in a westerly direction. As far as I am aware there was a lot of unburnt country to the immediate west and north-west of Banksiadale, but that the fire was held at the previously prepared line. That is as I understand it, and if that is correct the colouring on that map would be in error as Mr. McArthur suggests.

BY THE COMMISSIONER: Is there anyone who could tell us the exact position?---Forester Rutherford could, because he was there at the time, and also I think the officer in charge of Dwellingup, Mr. Frank Campbell, would know. A number of officers spend a good deal of time in collecting this data and I have been trying to collate it. I cannot claim it is 100 per cent. accurate.

BY MR. McARTHUR: I think also on page 5, in the third and fourth paragraphs, you may be incorrect when you say, "about 1830 hours the wind freshened from the north and by 2020 hours was blowing at Dwellingup at gale force". I think that as Mr. Wallace may explain, the wind was continually dropping in velocity until 2020 hours and at that stage an extremely strong southerly wind arose. Would you mind checking that statement?---I would say that any statement in connection with the weather would be accurately given by Mr. Wallace. If it is to be corrected it would certainly be corrected by anything he presented.

BY MR. PURSE: That second area of unburned country north of the Dwellingup-Pinjarra Road you quoted as being in between the burnt country and lit in a backburn, but you also had a lightning strike at No. 15 to the west?---I was informed that that fire spread very little. It was in pretty light country. It was actually in a privately-owned block where it originated.

That is in forest country?--- No, I think I quoted the location as No. A7.

Apparently it was in country with light timber and very little spread.

The back-burn there was actually formed, according to your colours, the day before the fire of any size, or did the fire keep on coming? Was that all back-burn or partly lightning fire?---As far as I know, it is all back-burn. There would be a small area of lightning fire around the actual strike.

BY THE COMMISSIONER: Have you anything more to add, Mr. Stewart?---No, Sir.

Will you be available this week and next week?---Yes.

(The Witness retired)

THE COMMISSION ADJOURNED.

D.W.R. STEWART,
10/5/61.

THURSDAY, the 11th MAY, 1961.

ALLEN HERBERT SUTHERLAND,
Secretary, Bush Fires Board.
recalled and further examined:

BY THE COMMISSIONER: I understand you have some exhibits to tender, Mr. Sutherland?---Yes, Sir, and I must apologise. The report that was stated to be included with the exhibits was, in fact, not handed in. I would now like to tender the reports by Senior Warden Hale and Warden Straker on fires in the August-Margaret River Road Board district, 1961.

| | | |
|---|---|---|
| EXHIBIT | EXHIBIT A7 : | Reports by Senior Warden Hale and Warden Straker on fires in the Augusta-Margaret River Road Board district. |

I would also like to tender a map showing the wards of the Road Board Association. The colour washed areas are the wardens' districts.

| | | |
|---|---|---|
| EXHIBIT | EXHIBIT G : | Maps showing wards of Road Board Associations. |

I understand there are more wards in the State than shown here. There are eight, are there not?---Yes. That is correct. I would now like to tender a list of approved areas declared under the Bush Fires Act, 1937, and the Bush Fires Act, 1954.

| | | |
|---|---|---|
| EXHIBIT | EXHIBIT H : | List of approved areas declared under Bush Fires Acts 1937 and 1954. |

(The Witness retired)

A.H. SUTHERLAND,
11.5.61.

WILLIAM ROY WALLACE, 14 Wood Street,
Inglewood, sworn and examined:

BY THE COMMISSIONER: You are representing the Forests Department?---Yes.

I understand you have prepared some evidence for the Commission?---Yes, on the weather associated with the Dwellingup fires. My statement of evidence is as follows:-

The information submitted hereunder has been divided into three sections :-

(1) Weather during the early part of the fire season (up to 31st December, 1960).

(2) Weather during the immediate pre fire period (1st to 18th January, 1961).

(3) Weather during the actual fire period (19th to 25th January, 1961).

(1) Weather during early season (up to 31st December, 1960) :

Dwellingup with an average annual rainfall of 50.88 experienced a dry year during 1960, with an annual rainfall deficit of nearly five inches. This deficit occurred during the months August to September. The comparison of average and 1960 annual rainfall is tabulated in Appendix (1) attached.

In addition to the drier than normal year, mean monthly maximum temperatures were above average for the months October to December, as shown below :-

TABLE (1)

DWELLINGUP

Mean Monthly Maximum Temperatures

| Month | Mean (°F) | Actual (°F) | Departure from Mean |
|---|---|---|---|
| October | 67.0 | 70.0 | + 3.0 |
| November | 74.4 | 76.1 | + 1.7 |
| December | 79.5 | 83.7 | + 4.2 |

In conjunction with these higher temperatures heat wave conditions were experienced from 21st December to 25th December. The maximum temperature distribution for the whole period is shown in Appendix (2) and the fire hazard distribution in Appendix (3).

(2) Weather during the pre-fire period (1st January to 18th January) :

During this period both fire hazards and temperatures were high, and very dry

conditions prevailed. The lowest hazard recorded was 7.8 (High Summer) and the lowest daily maximum temperature was 82°.

The fire hazard distribution for this 18 day period was as follows :-

| | |
|---|---|
| High Summer | 5 days |
| Severe Summer | 10 days |
| Dangerous | 3 days |

Associated with the high fire hazard five days with temperatures of over 95°F had been recorded. Fire weather for the period is shown in Appendix (4).

During the latter part of this period a cyclone formed off the north west coast of Western Australia and intensified as it moved slowly down the coast in a south westerly direction. The path of the cyclone is plotted in Fig. (1) attached.

Troughs of low pressure associated with this cyclone formed down along the west coast and caused heat wave conditions and high fire hazards which continued throughout the fire period. Also associated with this weather system was marked air instability, which contributed to the dry thunderstorms which were the primary cause of the numerous fires.

The five day period before the fire gave the following readings :-

| Date | Fire Hazard | Max.Temp. degrees Fahr. | Min relative humidity %. |
|---|---|---|---|
| Jan.13th | 8.3 | 90 | 15 |
| 14th | 9.2 | 97 | 17 |
| 15th | 9.6 | 102 | 17 |
| 16th | 8.3 | 91 | 22 |
| 17th | 8.8 | 98 | 24 |
| 18th | 10.0 | 107 | 11 |

(3) Weather at Dwellingup during the fire - 19th Jan. to 25th January :

Thursday 19th January :

| | |
|---|---|
| F. H. | Dangerous |
| T.max. | 104° |
| Min R.H. | 19% |
| Winds | Moderate N.E. winds backing N, N.W., and S.W. during the day, light and variable at night. |

Thunder and lightning was experienced commencing at about 18.30 hours associated with unstable air in the trough and a number of lightning fires occurred at this period.

Friday 20th January :

| | |
|---|---|
| F.H. | Dangerous |
| T. Max. | 104° |
| Min.R.H. | 16% |
| Rainfall | 1 point (actually this fell on the previous evening at the time of the thunder and lightning). |
| Winds | Moderate E.N.E.-E.S.E. winds during the day and light to |

moderate variable winds at night. A second series of thunderstorms was experienced at approximately 22.00 hours and further lightning fires occurred.

Saturday 21st January :

| | |
|---|---|
| F.H. | Dangerous |
| T.max. | 101° |
| Min R.H. | 20% |
| Winds | Moderate to fresh - E-N.E. winds backing N.W. and S.W. during the day, with moderate gusty S.E. winds at night. |
| | These wind changes were associated with the movement eastwards of a trough of low pressure. |

Sunday 22nd January :

| | |
|---|---|
| F.H. | Severe summer approaching dangerous. |
| T.Max | 100° |
| Min R.H. | 27% |
| Winds | Moderate S.E. winds veering S.W. during the afternoon and evening. |

These winds were still very hot as they were coming from the trough which had moved inland and were actually recurved north easterlies. Moderate S.E. winds after midnight. The air was more stable, however, and this considerably aided fire suppression action.

Monday 23rd January :

| | |
|---|---|
| F.H. | Severe summer approaching dangerous. |
| T.max | 98° |
| Min R.H. | 27% |
| Winds | Moderate E. winds which decreased in strength during the afternoons, but again increased in strength during the early evening. |

By this time a new trough had formed along the west coast with the axis of the trough extending southwards from the centre of the cyclone.

Tuesday 24th January :

| | |
|---|---|
| F.H. | Dangerous. |
| T.max | 106° |
| Min R.H. | 13% |
| Winds | During the early part of the day the winds were moderate N.E., N. winds backing N.W. The N.W. Breeze which commenced about midday showed a marked increase in strength. |

At this time numerous breakaways were reported from the Dwellingup fires and a wind velocity of 37 knots was registered at the Perth Weather Bureau at 2 p.m.

Although this wind had a westerly component, it did not produce any cooling effect as it was largely influenced by the hot northerly gradient wind.

During the late afternoon a small cell of low pressure formed in the trough to the S.W. of Dwellingup and this had the effect of reinforcing the overall gradient winds. The intense temperatures in the fire area must also have had a further marked effect on wind force.

The Perth Anemometer recorded 39 knots at 8 p.m. at about which time Dwellingup was overrun. There is little reason to doubt the reports of local officers that the wind at this time was of gale force. It is pertinent to record also that in a sample plot 1 mile south of Dwellingup aluminium number tags at 5'3" above ground level on sample trees were completely melted. Aluminium melts at approx. 1200$^{o}$F.

The first strong winds which struck Dwellingup were generally from the N.W. to N.N.W. but during the day the early hours of the 25th January, another very strong series of gusts were recorded from the N.N.E. The Perth Dynes recorded a maximum gust of 44 knots at 12.45 a.m.

During this period the small secondary low pressure cell moved south easterly and filled and at the same time the intense northern cyclone crossed the coastline near Carnarvon and immediately started to lose intensity.

Tuesday 25th was hot (92$^{o}$) but much more humid with light variable south to south-west winds and thunder clouds forming towards midday.

Some thunder and lightning was in evidence and light rain commenced falling in the fire area in the late afternoon and evening.

This rainfall of about 50 points was general over the area and stopped the running fire.

Mopping up operations continued along this huge perimeter -- approximately 250 miles -- for the next two to three weeks and minor breakaways were frequent. Temperatures remained relatively high with seven days exceeding 95$^{o}$F.

As the Dwellingup Weather Station was not re-established until 10th February maximum temperatures for the period have been taken for Perth and Kalamunda and are shown in Appendix (5).

You have attached certain appendices to this evidence you have submitted. Are you prepared for those to be taken as exhibits? They will not be included in the evidence but will be available for perusal, of course?---Yes.

EXHIBIT "I" — Appendices (1) to (5) incl. and Chart showing the path of the centre of the cyclone from the 16th to the 28th January, 1961.

11/5/61.

They consist of :

Appendix (1) - Rainfall at Dwellingup for each month for the year 1960.

Appendix (2) - Mean monthly maximum temperature.

Is that the correct way of expressing what you have shown? Is it not a daily maximum temperature you have shown for each month?---It would be better to call it the mean monthly maximum temperature range.

We will alter that as follows :-

Appendix (2) - Mean monthly maximum temperature range from October to December, 1960, at Dwellingup.

Appendix (3) - Fire hazard distribution at Dwellingup from the 23rd October, 1960, to the 31st December, 1960.

Appendix (4) - Fire weather data at Dwellingup from the 1st to the 24th January, 1961.

Appendix (5) - Maximum temperatures from the period 25th January to the 14th February, 1961.

Then there is attached a map showing the centre of the path of the cyclone from the 16th to the 28 th January, 1961?---I have some other charts here. I have been unable to procure copies from the Weather Bureau of actual charts because the originals are at the Government Printing Office. I have asked the Divisional Meteorologist to see if he can withdraw those charts from the Printer until I have some definite information as to whether you want a copy of them or not.

What are they?---They are actual copies of the weather charts. They are drawn at the Weather Bureau at certain times of the day and cover the periods of the fire. It gives a picture of the actual movements of the weather systems through the period. This one I have in my hand is for the 20th of January. However, there is a complete series from before the fire to the 25th January.

We would like to have them in the case of this fire?---I will have to arrange with the Divisional Meteorologist to get them for us.

Thank you. Are you handing those in?---No. I am afraid I can't. It is the only set we have, but it is available for perusal or discussion.

You will see that we get the other copies?---Yes. Associated with that one is this one which was a copy they made for me yesterday of the 6 p.m. chart for the 24th January. That was the only one I could get from them yesterday and I will hand it in.

EXHBIT EXHIBIT "J" Weather Chart which is a copy of the chart made at the Weather Bureau for 1800 hours on Tuesday the 24th January, 1961.

I have here also part of the departmental records which is a copy of the anemometer recordings for this period. Again we would have to get copies if you desired them.

We would like them, thank you. You obviously know something more about meteorology than most of us here. Would you tell us what your training and experience has been in meteorology?---I am afraid I first took up fire weather studies as a hobby about 1932 and established the first weather station in the Forests Department at Dwellingup about that period. Subsequently, after pursuing my private studies, I suppose you would call them -- and gleaning what I could from the Divisional Meteorologist of the day, I attended a training school at the Meteorological Bureau in Melbourne in 1939 and a further advanced school in 1945. Since the period from 1932 to 1934 when we actually started to record our work in detail I was the department's fire weather officer at Dwellingup until 1953. Since that period I have given oversight to the officer who has been doing the work there.

Who has been doing it recently?---Mr. Hatch.

You have presented the weather information in three sections -- the early part of the fire season, the immediate pre-fire period, and the weather during the actual fire period. Dealing with the weather during the early season, you say Dwellingup experienced a dry year. Actually it is only a 10 per cent. reduction on the

average for the year I think, or something like that but what you do have might be worth bringing out. You only had 50 per cent. of your average rainfall from August to December?---That is right. The deficit was from August onwards.

They are impressive figures I think?---It shows on a chart I have here. The light line is the average rainfall accumulative from January to December. The actual rainfall is shown by the dark line and the squares are 5 inches of rainfall.

You say that prior to about August you were really receiving more than your average?---Yes.

Would you consider that the rainfall of previous years had any effect upon the general moisture conditions in the Dwellingup district in the summer of 1960-61?---I would not think so.

On page 2 you refer to the fire hazard distribution. You refer to high summer, severe summer, and dangerous, which I take it is your fire rating for certain days. Would you tell us what you mean by this fire hazard and how it is worked out and classified?---Fire hazard is a term used in Western Australia, and has been used for the past 25 years, to indicate very broadly the effects of weather as a whole on the inflammability of the litter. The scale we use is from zero to 10, zero being a day when fire will not run at all, and the 10 being a day of maximum hazard as we have known it over the years. This scale of 10 units is broken up for general purposes into an empirical scale, which is a fire hazard of nil, below 1; low, from 1.1 to 4; moderate, from 4.1 to 6; average, 6.1 to 7; high summer, 7.1 to 8; severe summer, 8.1 to 9; and dangerous, 9.1 to 10. The method of arriving at this scale was purely empirical, but it was based originally on the same method which is still in use on the variation in moisture content of ½ inch pinewood cylinders, or fire hazard sticks as they are sometimes called. The variation in moisture content of those fire hazard sticks was found to vary fairly consistently with different types of weather, and different degrees of difficulty in fire suppression, depending of course on the amount of fuel available at the time of a fire occurring or in the area where a fire occurred. The critical days, of course, in summer are those which we term severe and dangerous or, on the numerical scale, the days which are above 8. Is there anything further that I can assist you with?

No; I think that covers it pretty well, as far as I am concerned. About the 5th paragraph on that page you say: "Also associated with this weather system was marked air instability which contributed to the dry thunderstorms which were the primary causes of the numerous fires." Were there any thunderstorms which occurred before the 19thJanuary?---Yes, I think so; about the 11th or 12th I think.

We haven't got the fire hazard figures, have we?---I don't think so, no -- or have we? The fire hazard on the 11th was 8.1 -- Appendix IV.

Still pretty low. Did you have any fires arise from those thunderstorms?---No, not at that time.

Are you able to give any indication why you did not have any strikes on that day that set light to the country and you did later? Are there any outstanding differences in the weather on the two occasions?---I would think the thunderstorm on the 11th was mild. It was reported but not, probably, earth to ground the lightning. It may have been cloud to cloud lightning.

Your temperature was moderate?---Yes, and the humidity was higher, which is not uncommon with thunderstorms. Also the thunderstorms heard may not have been actually in the forest area. Although you could hear them, they may have been 30 miles away.

Some of your terms may be a little strange. You say that thunder and lightning were experienced on Thursday the 19th January, commencing about 1830 hours associated with unstable air in the trough. What do you mean by the trough?---Trough is a term commonly used by meteorologists -- I think I can best show this by a demonstration. When a depression establishes itself on our north-west coast, the centre is here (indicating) but it has the effect of sending a draught of tropical air right down here (indicating), and the configuration of the isobars which show the boundaries or the variations or depressions between two high pressure centres comes

down into a dip, which is referred to as a trough. The instability of the air is caused by the inflow of tropical air which is heated in depth, compared with air down here (indicating) which is heated but not so deep.

Thank you. On Saturday the 21st January, from your description, it looks as if the wind went the whole gamut of the compass?---I think that was the day on which it did; the reason being that on that day, the afternoon and evening, the centre of the trough or the trough line moved eastward -- the trough line being this line here (indicating); it is a line through the centre of the trough to its peak -- vacillates in these circumstances, which means it moves in and out over the coast; inwards during the day, outwards during the night, until ultimately it moves right across eastwards. When that happens you find the trough line and the trough itself moving in that direction. The effect of that is to give you winds going completely around the compass, and the subsequent winds are usually much more stable -- as they were on the Sunday and the best part of the Monday -- because they were associated with continental air from the high pressure system, and not from the tropical air.

BY THE COMMISSIONER: When you speak of continental air, what do you mean?---That is air coming over the Australian continent.

On Tuesday, the 24th January, and on the other days, you showed the relative humidity. Can you obtain any indication as to how long the relative humidity persisted at about that strength ?---I could obtain it for Perth only. The Dwellingup records were lost in the fire. I do not know whether the Commonwealth station has a recording.

How often do they take it?---The only way you can get it is that it is graphed. It is a recording hygrograph. The Perth figures are available. They will not give you the same readings as Dwellingup, but they will give you an indication of the period at which that happened.

I thought you might be able to get some figures before your Dwellingup station was burnt out which would show the extent of co-ordination with the Perth figures. I suppose changes in weather may make a considerable difference to them?---There is no correlation except that in, say, stable conditions on a general run of summer days the temperature at Dwellingup would be 2 to 3 degrees below that of the Perth Observatory. That is probably due largely to the fact that Dwellingup is further south and at a higher altitude. With relative humidity there does not seem to be very much correlation at any time, although there is a general trend the same way.

As far as temperature is concerned, I notice in one case you have given the figures for Perth and Kalamunda after the Dwellingup station was destroyed, and even before that?---Yes.

Then some figures for Dwellingup when the station was established again. Could you obtain the figures for Perth and Kalamunda for days when the Dwellingup figures were available such as after the fire as well as before so we can see the extent to which they may be correlated?---Yes. They can be obtained from the Weather Bureau.

Can you tell me what you mean by "gradient winds"?---The gradient wind is the wind associated with the isobaric situation. Broadly, the closer the isobars, the stronger the gradient wind. In a low pressure area, the gradient winds run in a clockwise direction, and in an anti-cyclone area they run in the opposite direction. A gradient wind is the one associated with the intensity of the isobaric distribution. Here is an example for Tuesday, the 24th January, when hurricane winds were being experienced in the vicinity of Carnarvon; and it was at this period when Dwellingup suffered its major trouble. This gradient wind was affecting Dwellingup and the south-west generally; and superimposed on that gradient wind was the gradient wind associated with this small centre of low pressure that established itself just below Dwellingup.

Your "over-all gradient wind" means the combination of those two winds?---Yes.

You say the aluminium tags on trees 5 ft. above ground were melted. There was no question that they did not fall off the trees and melt on the ground?---They could not have fallen off. The copper nails were still in the trees.

So the temperature at that height was something over 1200 degrees Fahrenheit?---I should think so.

It sounds a tremendous temperature?---It is fantastic. How a tree could survive, I do not know. That would be higher than the normal temperature of the fire, to some extent, because fairly heavy thinning had been carried out in that sample plot about 18 months prior to the fire, and although the tops had been roughly scorched, there was a fair amount of fuel in that area.

In the fourth paragraph you say that the first strong winds which struck Dwellingup were generally from the north-west. What time of the day did the first strong winds strike Dwellingup ?---I could not tell you from actual experience; I would have to find out from the local officers.

I would like to know?---Mr. Melisi, who is present, could possibly answer that one.

Mr. Milesi is not sworn in at the moment?--Mr. Milesi suggests it was half-past one. I can say what happened in Perth. On Tuesday, the 24th the wind force increased from about noon to 2.30 p.m., and then declined in strength. This was the period when most of the breakaways occurred in the Dwellingup area.

What time was that?--Here it shows from noon to 2.30. These winds were up to 37 miles per hour, and the direction was fairly constant in the north-west.

Then you had another very sudden and severe gust in the afternoon. What time was that?--It is shown here at 8 p.m. in Perth. In view of the weather, I should think it would be roughly the same at Dwellingup, allowing some addition due to the low pressure cell. You will notice here it shows there was a marked change of wind and then a typical frontal effect. The wind changed from north to west and south-west, and then chopped to south-east and back to the north, in the period of half-an-hour.

You say the Perth "Dynes" recorded a maximum gust?--That is the recording anemometer.

Would you explain what you mean when you say in the next paragraph "during this period the small secondary low pressure cell moved south-easterly and filled"? What does the word "filled" mean?--That is a common term used in meteorology for a low-pressure centre, particularly a small one which loses its intensity. I could have said the same about the depression to the north--the intense one.

In the next paragraph you have a typographical error. You say, "Tuesday, 25th"?--That should be Wednesday.

W.R. WALLACE,
11/5/61.

In the next paragraph you say some thunder and lightning was in evidence and that light rain commenced falling. I am wondering whether you have any idea as to the extent the last season may have been abnormal in the number of thunder storms that occurred in the Dwellingup district ?--I can perhaps give you an idea, though I have no facts to support it. I was stationed at Dwellingup for 25 years or so, and during that period I would say we had about five spells of bad lightning. There have been occasions when we have had 11 to 17 fires within the period of a few hours. I have not experienced in the 25 years I have been there two spells of lightning on two successive days.

They did have it in this case ?-- Yes, they had it on the Thursday night and again on Friday night.

BY MR. McARTHUR: Somewhere in your evidence when you were describing the fire hazard classifications you mentioned that severe and dangerous were the two most critical classifications. I understand that with the forecast of dangerous there is virtually a total prohibition on the lighting of fires; they are not allowed to be lit under permit. Do you consider that should also apply to the severe fire classification ?-- You are talking of a period outside the closed season.

Yes ?-- I would say that the farming community which is most interested in burning, and the forest staff which is also interested in controlled burning, must have some reasonable time or number of days in which to burn, and if we prohibited burning on both the dangerous days and severe summer days, we would so reduce the number of burning days as to cause a considerable outcry anyway. In point of fact there are few dangerous days in the early part of the season, prior to December 15th, which is normally the closing day in the South-West. But there are a few in March. The opening period in March has been so varied that I am not sure when each district has its burning period opened.

You would consider that there would be a fair element of risk in burning operations on those severe days ?-- Yes. I have always said from a forestry point of view that controlled burning of firebreaks in forested areas becomes critical at a temperature of 82°, which is below a severe summer temperature. But you cannot be dogmatic about temperature, because it is also associated with humidity and other factors.

BY THE COMMISSIONER: When you say it becomes critical around 82° what do you mean ?-- I mean it is liable to spot.

BY MR. McARTHUR: On such a day, the element of risk would increase or decrease depending on the wind velocity. It would be more dangerous on a windy day than on a day of light winds ?-- Above that temperature of 82 or 83 it is frequently associated with a shallow frontal effect when a sea breeze comes in, and it is mainly that which causes most of our trouble. But it is easier to say that a temperature of 82° is critical, because they know what we mean. If we talked about shallow fronts and sea breezes it would be more difficult to get the message across.

(The witness retired).

HENRY JAMES HALE, Senior Warden Bush Fires Board,
recalled and further examined:

BY THE COMMISSIONER: Earlier this morning Mr. Sutherland handed in a report prepared by yourself and Warden Straker on fires in the Augusta-Margaret River district. (Exhibit A7.) Would you be good enough to read that report so that it might be included in the evidence ?-- Very well. It is as follows:-

The Secretary,

Bush Fires Board:

The following is a general summary of investigations into various fires in the Augusta-Margaret River Road District, which occurred during the early part of the restricted burning season.

In each case a brief outline is given as to where, when and why the fire started, and some details of the damage caused.

It appears that, although the fires covered a very large area, very little of the area concerned was State Forest or under Forestry control.

The following fires were investigated:-

1. Treeton:

This fire occurred on Location 3057, occupied by R. McLure. The fire was lit shortly after 6 p.m. on the 28/2/1961, a permit had been obtained and as far as our investigations disclosed all appeared to be in order. The area of the burn has since been cultivated, so it was not possible to ascertain the condition of the firebreaks.

It is understood that the area burnt consisted of clover pasture on which school aged children had collected and heaped sticks so that clover gathering could proceed. The fire was checked early on the morning of 1st March by McLure and considered to be out. At about 11 a.m. on the same day, Mrs. McLure saw some smoke rising, but as she is a cripple, was not able to inspect, but presumed it would be all right as her husband was so careful. Some two or three hours later smoke had considerably increased and she raised the alarm, per telephone.

Local brigade and other volunteers were quickly on the scene. Forestry also sent assistance on Thursday the second March.

Damage consisted of approximately 150 acres of pasture, some fencing and 750-1000 acres timber and bush lands.

District Forest Officer W. Eastman of Busselton expressed complete satisfaction with the brigade actions and complemented them on their work.

It is considered that no action against McLure is warranted, as he had complied with the necessary requirement and was sure that no fire was burning on his property.

2. Rosa Brook:

This fire started on Sussex Location 1924 owned by L. Silverthorne. It was lit by the owner on the 27th February, to enable cultivation to take place. A considerable number of dry trees were standing on the area. The fire spread from tree tops to adjoining properties owned by Silverthorne's brother, also Smith's and Lilly's. The fire escaped at about 1 a.m. on the morning of the 2nd March.

A permit had been obtained and all requirements except notification to Local Authority and Forestry had been complied with.

Silverthorne and his assistants cut down many large trees by chain saw and took all possible steps to control the fire.

Very little damage resulted, mainly to his own and his brother's property.

3. Alexandra Bridge:

This includes fires known as Cussack, F. Marsh, Bell and Payne.

All these fires were lit by the above people on their own various locations. The reasons given were that burning was necessary to enable cultivation to be carried out on the land. The fires were lit on the 27-28th February and escaped on the 1st March when dangerous conditions with high winds existed.

It is difficult to ascertain the damage each or any fire caused, mainly because all fires at some stage or other join and rejoined. The overall damage included 1,100 acres of pasture 22 tons of hay, 4 sheds, and 13 miles of fencing.

It appears that Cussack, Bell and Payne all had permits and conditions were complied with. Once again dangerous conditions two days after the fire was lit was the reason for their escaping. In the case of F. Marsh, he did not comply with the conditions of his permit as he lit up several days before the date on the permit, believing that if he waited, forecasted rain would prevent him getting a good burn.

We feel that he should have at least consulted the Fire Control Officer and had the date altered. Also it is believed that Marsh lit his fire on the afternoon of the 1st March when a severe to dangerous hazard existed. A total ban was imposed at 5 p.m. Marsh admitted that he had not listened for a forecast of the district hazard.

Under the next heading of "Karridale" I would like to make some additional comments after the second paragraph in my statement. My statement continues as follows:-

4. Karridale:

This fire was lit on the 27 February, by H. Hollands on Location 2760 owned by him. Mr. Hollands is a Fire Control Officer for Forest Grove. No permit was obtained for this fire. Mr. Hollands stated that as a Fire Control Officer he did not require one. The local authority and Forests Department were not notified of the impending burn. Firebreaks at least 10 feet wide surrounded the area, although not completely free of inflammable material, were average breaks. Fire was patrolled after being lit and Mr. Hollands himself was on the location when the fire crossed the firebreak.

The Forests Department was notified that the fire was in their forest, at approximately 4.30 p.m. on the 1st March and again at 2 a.m. on the 2nd March. Forests Department fire gangs arrived at about 5 a.m. on the 2nd March.

BY THE COMMISSIONER: If you wish to add to your statement you could do so at this stage?---The additional comments are as follows:-

Although we were given to understand that the second telephone call to the Forestry was made at 2 a.m. we have since learned that the message was not delivered to the Forestry by hand until some hours later. This does put a different picture on the next paragraph.

In the circumstances do you wish to retain the third paragraph?---No, I wish to withdraw it. My statement of evidence continues --

It is understood that some spring burning had been done, so perhaps it was expected or hoped that it would be controlled by the local people in this area, so one must conclude that either the Forest officers had complete faith in the local brigade or just weren't interested enough to make inquiries.

Dangerous weather conditions, high winds, lack of adequate firebreaks and dirty bush country are definitely responsible for the rapid spread and considerable damage which resulted. The fire first burnt in a south-westerly direction, then southerly and finally easterly, and possibly joined with the Alexandra Bridge fires.

The losses listed below are approximate only.

| | |
|---|---|
| Pasture | 6,600 acres |
| Hay | 360 tons |
| Fencing | 120 miles |
| Stock | 5 pigs |
| | 1 cow |
| Buildings | 7 houses |
| | 5 milking sheds |
| | 11 hay sheds |
| | 16 other sheds |
| | General store |
| | Church |
| | Old Hospital |
| | Hall |

It is understood that Forestry losses are not very high, but no estimate is available.

5. Augusta-Flinders Bay:

An extensive fire burnt through the above area on the 15-16th February.

We were not able to ascertain the cause of this fire, but it is believed that it started in the Deep Dene area, and apparently travelled back and forth, burning out a large area of bush and timber lands. We understand that only a change of winds prevented both Augusta and Flinders being razed. There is every indication that the fire was particularly fierce.

Very little damage was caused to private property and at present no estimate is available for timber losses.

General

Below is a list of reasons that contributed in some degree to the spread of the fires and the resultant damage:-

(a) Burning season opened too early for this season.

(b) Local Authority did not use its powers to postpone the end of prohibited burning season.

(c) Fire Control Officers should have used more discretion in the issue of permits, particularly for the type and area of proposed fires.

(d) Farmers should have been more cautious and taken more precautions before lighting.

(e) Many requirements of the permits were not complied with and little commonsense was used in lighting some fires.

(f) General apathy by many farmers and residents to bush fire brigades and fire control and prevention in general.

(g) Not sufficient patrolling after burns put through. This is very evident, because all fires escaped some two days or so after being put through.

(h) Lack of adequate firebreaks. This applies mainly to properties other than those where the fires were lit.

(i) Dirty bush lands. This includes private, Crown land and Forestry. It is claimed that one area had not been burnt for 34 years.

(j) Unseasonal weather conditions. It is most unusual for this area to have had little or no rain from September 1960 till recently. This factor was apparently not taken into consideration by any of the parties concerned.

(k) Misleading weather reports. It is understood that rain and decreasing hazards were being forecast for several days during the period these fires were lit.

(l) Lack of communications. Some areas have no telephones, others that did, were soon out of action with trees across the lines or burnt poles. Considerable difficulties were encountered in organising fire fighters, machinery and other necessary appliances and to make the best use of what was available.

(m) Lack of Road Board or suitable central fire fighting unit. We feel that all local authorities should have central units available. One would have been most useful in the early stages of the Karridale fire.

(n) Time lag between notification and action of the Forests Department. It is considered that this aspect could be discussed at future meetings in the district, in an endeavour to arrive at better understanding and cooperation.

(o) Lack of equipment to supply volunteers. It is believed that much manpower was not used because equipment was not available. This is a difficult situation to overcome. Perhaps the local

authorities or groups of them could organise a pool of such equipment. Keeping a check on such equipment would also be a problem.

Recommendations.

1. The local authority must not only issue, but enforce a suitable firebreak order. This should provide for firebreaks around all cleared or partly cleared land, immediately surrounding all buildings, hay stacks etc. Consideration should also be given to a firebreak around the property boundary, including all bush lands. The latter provision could be waived provided the settler burnt a 10-chain strip around his bush country.
2. More protective burning. This would in some parts tie in with their firebreaks. A strict check must be kept on all bush, no matter who owns it to see that it does not become a high hazard. All plans for protective burning should be co-ordinated with the various departments.
3. The local authority should make more use of the Advisory Committee. Although this committee is a comparatively new one it will have to work closely with local authority, brigades, Forestry and private property owners.
4. The local authority should give immediate consideration to the purchase of a central heavy duty fire fighting unit. It is possible that, had such a unit been available when the fire first escaped, it could have considerably altered the story.
5. The local authority to circularise all land holders on the general requirements of the Bush Fires Act and in particular the procedure to be adopted before burning off, as is outlined on the Permit to Burn. Also, if possible, to include the above list of reasons why so much damage was caused by the recent fires.
6. That penalties under the Bush Fires Act be enforced in future. This would mean that all officers would be required to assist the local authority with prosecutions and other ways of enforcing the provisions of the Act.
7. The local authority to make further attempts to form a bush fire brigade in the Augusta area. From brief discussions in this area we feel that no great effort would be required at the present time.
8. The local authority in conjunction with the Advisory Committee to take stock of the activities and functions of all officers and brigades in the district to see if redistribution of areas and zones is necessary or warranted.

BY THE COMMISSIONER: Speaking of the Treeton fire, can you tell me what the weather was like at the time it was lit?---No Sir.

Can you tell me when the restricted season opened in that district?---The restricted season commences on the 1st October in each year. Perhaps you mean the prohibited season?

No, I mean when the prohibited season ended?---I could get it for you. The information is in my bag.

Would you mind getting it because it is rather important?---Augusta-Margaret River comes into Zone 2, which is on the 22nd October, 1960, to the 26th February, 1961, inclusive, excepting that the commencing date shall be the 22nd December, 1960 for the Augusta-Margaret River district.

I do not quite follow that?---For Zone 2 the prohibited time is the 22nd October 1960, to the 26th February 1961 inclusive, but the commencing date for the Augusta-Margaret River district is the 22nd December, 1960.

Who decides that variation?---It is discussed at the Bush Fires Board meeting each year and declared by the Minister.

On the board's recommendation?---Yes.

So that actually this man lit this fire a day after he was legally entitled to do so?---That is right.

And he lit his fire on the 28th. Do you not say in the second paragraph that the fire was checked early on the morning of the 2nd March? Do you mean it had escaped?---No, the fire area was inspected by the owner to ensure that it was safe.

I see. When you say he was sure there was no fire burning on his property, it actually was burning was it not?---Apparently so, Sir.

The second fire at Rosa Brook was on the 22nd and the same thing applies does it not? That was the first day he could have been given a permit to burn in 1961?---That is right.

You say that a number of dry trees were standing on the area and that the fire spread from treetops to adjoining properties. I have gained the impression that those dead trees on cleared areas where burning off is done from time to time are very often the cause of the fire escaping. Would you think that any action should be taken to insist that people burning off that class of country should rake around those dead trees or fell them?---

?---I do feel, Sir, that some protection or action should be taken to prevent the tree getting alight. Whether raking around the bottom would in this case have prevented the trees from getting alight, I am not prepared to say.

I realise that; but it is a protection which would reduce the chances of the trees catching alight?---Yes.

You say, in connection with that fire, that a permit had been obtained and all requirements, except notification to the local authority and the forestry, had been complied with. That is rather important. Was the forestry anywhere in the vicinity? Was it, say, within two miles?---Yes.

How far away would it be; I just want a rough figure?---Three-quarters of a mile.

Did he give any reason why he did not notify the local authority and the Forestry Department?---I could not give his exact words, but I think he mentioned, or said, it was just "one of those things" he forgot to comply with.

This fire: Did it join up with any of the others?---No.

Again, the Alexandra Bridge fires: They were lit on the 27th and 28th February and escaped on the 2nd March. We haven't any evidence as to the state of the weather over that period from the 27th February to the 2nd March. We understand that before the 27th February the weather had been favourable to burning; it had been forecast that rain might occur. What happened between the 27th February and the lst and 2nd March regarding weather?---I have nothing with me. I might be able to obtain the weather conditions covering those days; but at this stage--

From where would you get them?---The only place would be the Weather Bureau.

Then we will not worry; the Weather Bureau will be giving us this information. This man Marsh: He lit a fire during the prohibited period, which I think would be regarded very seriously even if the weather was favourable. He does not know what is going to happen. Am I correct--he did light it during a prohibited period?---No. He had obtained his permit and it was dated for the following week or eight days in advance of when he actually lit. His fire, as far as I am able to gather, was also lit on the 27th or 28th February when it actually should have been lit some eight days later.

I see?--I understand that the control officer was concerned; a number of permits had been issued and he wished to delay this fire so that not too many were going through at the one time.

Then you think he actually lit it on the 27th. Also it is believed that Marsh lit his fire on the afternoon of the 1st March--I am referring to the last paragraph on that fire?---Yes; I am apparently mistaken there.

There is a bit of confusion. In the second paragraph you say they were all lit on the 27th or 28th, and you say that Marsh lit his on the 1st. Can you clarify that?---At this stage, no. I am a little bit confused myself at how the difference in dates has arisen.

I realise that it is some time since you made this examination. Can you clear this up by reference to your notes?---If not, then in consultation with Warden Straker I feel it can be cleared up.

You will let us know the actual day it was lit?--Yes.

You say: "A total ban was imposed at 5 p.m. He admitted he had not listened for a forecast of the district hazard." I imagine that could often happen; and in this case, applying to an emergency period, the Minister can declare it over the radio or by any other means he cares to do so. Normally he would declare it over the radio, I should imagine. What happens if a man does not listen to the radio and is not aware there is a ban on? What action would the board feel like taking?---In a case where a ban is imposed in the afternoon or evening, I do not think the board would take any action because we realise they may have listened to the earlier forecasts, morning and midday, and they had been favourable to burning or were not of a dangerous nature. If the ban was imposed after that time he would probably have left for the paddock to organise his fire; but it is his responsibility under the Act to know what the forecast is.

It is rather important, apparent1y, that the board should endeavour to have the Minister make the declaration on the early morning radio network?---That is usually the case.

I presume Mr. Holland has been notified as to what his powers are since he had the fire--as a fire control officer?---Yes, he has been informed at least that he must obtain a permit even though he is a fire control officer himself, and all the various people that he must notify.

Can he write one out for himself; can he give himself a permit legally?---I would not know legally, but we do advise all the control officers to obtain a permit from an adjoining control officer or from the local authority itself.

I think that is very wise; and he did not inform the local authority and Forestry Department. He must have been well aware of his obligation, or did he think he was relieved of that obligation?---From speaking to him and knowing Mr. Holland over a number of years, I think he was genuine when he said he did not think he need notify the local authority, but I feel also sure that he realised he should have notified the forestry.

Did he notify his neighbours?---Yes.

You say: "Fire breaks at 1east 10 ft. wide surrounded the area and although not completely clear of inflammable material they were average breaks." I do not know quite what you mean by "average breaks", but I presume you mean the sort of breaks that are struck in that district. Would you say that a break was not capable of carrying a fire across it? You can have a break that has obviously inflammable material on it but that material would not carry a fire?---That is so. From an investigation of the spot where Holland claimed the fire crossed, there was a considerable amount of burnt material on the break. A lot of that may have been leaves or stuff blown on to the break but there was some evidence of small tussocks on the break which had been burnt. Whether it ran across or whether those small heaps had been lit by debris blowing on to it, I am not prepared to say.

BY THE COMMISSIONER: Do you know how many men Mr. Holland had at the fire ?---Two besides himself.

You say, "It is understood that some spring burning had been done." Where was that; on private property?---In the forest lands.

So you conclude either that the forest officers had complete faith in the local brigade or just were not interested enough to make inquiries. There were other fires in the district in which they were interested. May they not have been tied up with those other fires?---It is possible.

Have you discussed the matter with the forestry officers since?---No.

You say that dangerous weather conditions, high winds, lack of adequate firebreaks and dirty bush country were definitely responsible for the rapid spread and considerable damage which resulted. When you speak of lack of adequate firebreaks and dirty bush country, are you again referring to forest land?---Not necessarily. That would also include private property.

And the dirty bush country also?---Yes.

Have you any particular piece of country in mind when you speak of dirty bush country? I was wondering whether we could get any evidence of when it was last burnt over?---One piece near the Karridale townsite was a piece I referred to in evidence which, we had been advised, had not been burnt for 34 years.

Is that forest land; Crown land?---I understand it is private land held by one of the milling companies.

Millars ?-- I believe so.

You say this fire did get on to forest land. Of the forest land that was burnt, was there any that you could say lacked adequate firebreaks and had dirty bush country?---I had no definite knowledge of either the firebreak situation or the dirty bush in that area.

You do not know what area of bush country these fires burnt over?--No.

Or how much forest land was burnt over?--No.

Take the Augusta-Flinders Bay fire. Is that country down there very subject to fires?--They do have a certain number. Whether it is more subject to fires than any other part of the South-West, I am not sure.

I have the idea that it is a fairly poor class of country used only for cattle grazing. Is that right?--Yes; along the coastal strip, certainly.

Was it not mainly the coastal strip that was burnt?--Yes. It went, more or less, from the Deep Dene side to the Flinders Bay side, and burnt almost the whole point or tip out.

Nobody seemed to be very concerned about it?--I would not say they were very concerned, but there was no brigade formed. There have been a number of attempts by various people to form brigades, and there still are a number of interested people endeavouring to do so, but it would appear there is general apathy on the part of the townspeople of Augusta, perhaps, so that no active brigade has been formed or is in operation.

Has it been your experience, generally, that country used for cattle grazing is much more subject to fires than country that is used for sheep grazing?--That is fairly difficult, but I think it could be said that the grazing country is often burnt out to gain the advantage of early feed.

You say amongst the reasons for the spread of the fire as a result of the damage that the burning season opened too early for the season for that particular year. It was too early as it turned out, but is there any reason why the Bush Fires Board should have recommended a later opening of the season?--No, not the Bush Fires Board. This is entirely in the hands of the local authority, and it is my opinion that the local authority should have postponed the opening of the burning season.

The Minister declares the end of the prohibited burning season?--Yes.

It is not a fixed date?--It is subject to variation.

And the local authority can alter that date and extend it?--Yes.

And you think in the light of the information they had about the weather that it would have been reasonable for them to extend it in that particular year?--I do.

I think we had evidence that the weather prior to that date was fairly damp and rain was forecast, and that is why they were anxious to get their burning through?--It had been quite dry for some months; unusually dry, I understand, for that particular area. There had been little or no rain or moisture at all. I am of the opinion that even if some rain had fallen it would not have prevented them still getting a good burning.

I am wondering whether you have any idea as to how that difficulty can be overcome. I can appreciate that the local people are inclined to take a little more risk than an outside authority would, because they feel confident of their own ability to handle fires; whereas people who have studied the matter on an overall scale know that feeling is generally exaggerated -- they are not as good at handling fires under difficult circumstances as they sometimes think they are. Have you any idea as to any way in which the local authorities might be guided or helped to realise and appreciate the situation in an instance such as that, so that they will extend the burning season?--They have recently formed an advisory committee. This committee usually has a fire control

officer representation and is representative of the local authority. If this advisory committee met just prior to the opening of the season and took all the factors into consideration it would be, or should be, in a fairly good position to advise a local authority whether or not to extend the season. That does happen in many districts.

You know a number of cases in which the prohibited period has been extended?--A number of districts each year extend the prohibited times. Where an advisory committee has been formed in some cases it is done in consultation with their brigades or control officers.

Can you recall one that did it last year?--There are a number, but it would be difficult to try to bring one to mind now. May I consult Mr. Sutherland on this?

Yes?--I have consulted Mr. Sutherland but I would prefer not to answer the question. It is done through our office; they handle that side of it. We are advised of the fact. We do hear of this sort of thing, but I cannot recall an individual district.

Can you tell me the advice that Mr. Sutherland has just given you?--I was informed that approximately 30 road districts this year extended the prohibited burning season.

And among them was Bridgetown?--Yes.

You say the fire control officers should have used more discretion in the issue of permits, particularly in the type of areas of proposed fires. When you say type and area of proposed fires are you referring to the burning off of cleared land with standing dead trees?--I am referring to the fact that permits could have been issued for pasture land rather than for bulldozed land or land that contained a considerable amount of timber either standing or fallen.

I presume the school that the Bush Fires Board conducts from time to time points this sort of thing out to fire control officers?--Yes.

When you say area of proposed fires do you mean that there were such large areas that burning should have been postponed for a little while?--I do not think any of the individual areas were very large, but it was something that should have been considered by the fire control officer in the issue of the permit -- the area of the fire, light fuel, heavy fuel, or bulldozing as the case may be.

When you used the word “area” you meant location rather than acreage?--I meant both.

You say that farmers should have been more cautious and taken more precautions before lighting. I understood from your evidence that when they did light fires the conditions were relatively safe. What additional precautions, under the circumstances, do you think it would have been reasonable for them to have taken?--Even though the weather at the time of lighting was favourable, I think they should have looked a bit further into the conditions before they lit, and perhaps made more investigations into what was likely to happen in the weather pattern. Just because rain is forecast may not necessarily mean that the hazard will be so reduced as to prevent a fire getting away.

How are they to make those inquiries and from whom?--A number of people have direct contact with the Weather Bureau. In all cases the Weather Bureau is happy to supply such advanced information as it is able to.

Would it not be more reasonable to expect the fire control officer who issued the permit to make those inquiries?--I do not think so. A fire control officer can cancel a permit after it has been issued if he considers that, should a fire be lit, it would be a danger.

In this instance we can take it they did not consider it would be an additional danger?--That is so.

We cannot blame the farmer who is less experienced than the fire control officer is expected to be, in lighting the fire?--Perhaps that is so. Although we realise the farmer has to get his burning done when rain is forecast, he should use every means to control it. I feel they should have been a little more cautious.

I am bringing forward the point as to whether or not there is even a greater obligation on the fire control officer who issues the permit, but who does not go on to the land to see if it is in a fit condition to be burnt.

Although he has power to cancel and revoke a permit, in this instance he did not make the inquiries which you would think the ordinary individual on the land should have made. It seems that the fire control officer is at fault as much as the farmer?---Yes, to a degree.

You say that many requirements of the permits were not complied with and little commonsense was used in lighting some fires. I understood they did not comply with the requirements of the permits in all cases in that they did not notify the local authority or the Forestry of their intentions to burn. Were there any other directions in which they did not fulfil the requirements of their permits, in general?---In one case we considered the farmer lit before the approved date on his permit. There is nothing else in there.

When you say they did not use any commonsense in lighting some fires, is there something more you can explain?---That ties up with the previous statement of mine, that farmers should have been more cautious.

That is with regard to the weather, and not the way in which they lit the fires?---That is so.

You referred to the general apathy shown by many farmers and residents to bush fire brigades and fire control and prevention in general. This seems to be justified by the circumstances. You further say that not sufficient patrolling was carried out after burns had been put through. You say this was very evident, because all fires escaped some two days or so after being put through. I can imagine a man in all honesty and after due consideration lighting a fire on one day and then patrolling it afterwards, but the fire still getting away. Do you mean that if a man is still patrolling a fire when it escapes it would be a simple matter to hold or control it afterwards?---Not necessarily. In the case of Karridale the owner of the land and the lighter of the fire was

actually on the location when the fire escaped, and he could not control it. Under the weather conditions existing, when fires do escape, even though they were patrolled, it possibly would not have made much difference in those particular cases. It is a point we are trying to raise all the time, that patrolling must be continuous until the fire is considered safe by the fire control officer.

In paragraph (i) of your statement you refer to the dirty bush lands on private property, Crown land, and Forestry. I understood you to say that you could not put your finger on any portion of Forestry land which could come under that category?---The term "Forestry" in this instance does not necessarily refer to land under the Forestry Commission. It refers to bush or timbered land which we class as forest.

Perhaps that should have been made a little plainer. When you refer to private, Crown land and Forestry, most people would take that to mean land under the control of the Forests Department. Do you prefer to alter this part of your statement as follows: "This includes private land, both cleared and timbered as well as Crown land"?---That would probably be clearer.

It is claimed that one area had not been burnt for 34 years. This refers to the piece of land near Karridale township which you believe to be on private property?---Yes.

In paragraph (j) you say the fact that so little rain occurred from September onwards was apparently not taken into consideration by any of the parties concerned. That seems to be the case. I take it that will be one of the matters which your board will be concerned with and will be trying to drive home to the people in the country. That is, they must take into consideration the dryness of the season preceding the opening of the burning period?---Very definitely.

A lot more could be done to draw publicity to such conditions. You speak of misleading weather

reports. It is understood that rain and decreasing hazards were being forecast for several days during the period these fires were lit. Have you copies of those forecasts with you?---No.

When you made that statement about decreasing hazards being forecast, had you checked in any way to see whether it was correct?---Not with the Weather Bureau. That was the information given to us by the people who actually lit the fires.

You say that considerable difficulties were encountered in organising firefighters, machinery and other necessary supplies, and to make the best use of what was available. Is there anything I have missed in that statement? I can understand difficulties in obtaining supplies, but I do not know why there should be difficulties in organising and making the best use of what they had under their charge?---

My impression would be that with the lack of communication--in many instances none whatever--it would be possible that machinery, men and other equipment could not be used to best advantage, if it was not known where it was really wanted at any particular spot or given time. It could be that machinery or equipment working on one face of the fire where it was doing a job could have been more useful in another section of the fire front, and had communications been adequate perhaps that machinery and men could have been better employed.

And the only way you can think of providing that communication satisfactorily is by radio?---Yes, at the present time when fires are on phone communications go out in that country very very quickly, and I not know of any other way. The roads are blocked from fallen timber. But if a headquarters was set up with an over-all controller who had wireless communication with all his various officers on the fire-front, I feel a much clearer picture would be available and much better use could then be made of supplies available.

You refer to the time lag between notification and the action of the Forests Department. Is that sort of incident frequent, or is it a very isolated instance where the Forests Department did not act promptly on the receipt of the advice?---I do not think it would be a standard procedure, and I think this in some way goes back to the spring burning which is referred to previously. Perhaps the Forester considered there was no immediate hurry or danger because of the spring burning.

That is only guessing, is it not?---Yes. I think it would be my own decision, if I were in that position.

It seems to me that it would be reasonable to say that there are two possible reasons--one is that the forces were otherwise engaged or had been and were not in a position to go to a fire, and the other that the officer thought the area was safe because of the burning that had been done. Anyhow, the matter will be

pursued. You speak of the lack of equipment there. Can you give me some idea of what there was in the way of fire-fighting equipment?---No, I have no list of what was there. That statement was made because we were told on a number of occasions that there was much manpower available but that they had nothing actually with which to fight the fire.

As you say, the road board has no central fire-fighting unit, or a suitable one, anyway?---No.

As far as the smaller items of equipment are concerned, I presume that the knapsack sprays and the rakes and axes would be provided by the private individuals in the district?---In many cases, yes, Sir. I should think there would be enough equipment for the local people, but when outside people come in to assist and they do not bring their own equipment with them, there is nothing for them to do when they get there. Therefore, unless they are used as relief firefighters, there is nothing they can do perhaps for considerable periods.

I do not know what you call the department over here, but I think most States have a department which would function as a main roads authority?---We have a Main Roads Department.

Would that department not have tankers in the various districts that could be used in firefighting?---They have water trucks for use on the roads.

Are they called into action at any time during these fires?---Not to my knowledge, Sir. I do not say that they have not been, but I have no direct recollection of seeing one at a fire.

I was just wondering whether a road board if it has no unit itself could make some arrangement with the department to have suitable equipment made available?---That is one avenue as far as the water supplies are concerned. We are also concerned with the knapsack sprays, rakes and shovels. Just how a pool of emergency equipment can be provided or made available at a major fire will receive consideration, I am sure, before another fire season.

One of the concerns seems to be that the small equipment will disappear?---Well, Sir, if you do not own or we do not own or firefighters do not own it, there is no direct responsibility for the equipment. At each fire numerous pieces of equipment are lost, missing or misplaced.

I can understand them being misplaced in a fire, but as far as them being taken off the scene by individuals not entitled to them, is it not the practice of various organisations here to paint their small equipment a distinguishing colour?---A number of brigades do paint their equipment a different colour each year. Some have brigade names or the road districts on them, particularly on the knapsack sprays, vehicles, and water drums.

Under the recommendations you say the local authority must not only issue, but must enforce a suitable firebreak order. Do you know if there were any orders for the construction of firebreaks issued in that district last year or last season?---I would not be too sure of that, Sir.

You say they should include provision for firebreaks around all cleared or partly cleared land immediately surrounding all buildings, haystacks, etc. Are you thinking of a 10 ft. wide break?---Something of that nature, yes.

You also say that consideration should be given to a firebreak around the property boundary, including all bushlands. Are you thinking of a cleared strip around the edges of the bushlands?---Once again it comes back, Sir, to the fact that property is held and not being used, sometimes by absentee owners or speculators, and I feel that such owners should be forced to provide some type of firebreak around the boundary of their properties which may be linked with firebreaks or protective work on occupied properties.

That is what you suggest? If they do not put in a constructed firebreak they could put in a strip not less than 10 chains wide burnt?---Yes.

In your second recommendation you say there should be more plans made for protective burning. You say they should be co-ordinated with the various departments. You are not referring to Government departments, are you?---I am referring to anyone who holds lands which should and can be protected.

Various interested bodies?---Yes, whether forestry, private milling companies, local authorities, or farmers themselves. It should be a co-ordinated plan throughout the district.

Whose responsibility do you think it ought to be to see that co-ordination is affected?---It is one of the activities which we hope will be accepted by the various advisory committees.

Do you know if these advisory committees include representatives of the Forests Department in any case?---I do not know, but it is quite often that a Forests Department representative attends those meetings. I should say in most cases that is so.

And the same would apply to your wardens? Do they attend the meetings?---Wherever possible, Sir.

H.J. HALE,
11/5/61.

You speak of the advisability of local authorities circularising all landholders on the requirements of the Bush Fires Act, and in particular the procedure to be adopted before burning off. I should imaging the first requirement would be for your board to circularise the local authorities and make them aware of what they should do. Do you do that?---Yes, dependent on and in consideration of the warden's report each year or each inspection he makes, the Bush Fires Board does communicate with the local authority and draws various points to their notice for their consideration and action.

That would include the matters you raise here; the requirements of the Bush Fires Act generally?---Yes. We feel that one of the general requirements of the Bush Fires Act is that the local authority should issue all landholders with a copy of "Fire Law", a little booklet on various requirements of the Bush Fires Act.

You say: "Penalties under the Bush Fires Act to be enforced in future." This would mean that all officers would be required to assist the local authority with prosecutions and other ways of enforcing the provisions of the Act. It seems to me that, generally speaking, you are up against a big difficulty there: That unless a man is considered to be a public risk or is unpopular in his district the local people are very loath to bring a prosecution against someone who might be a friend of his?---That is so.

You do not think the Bush Fires Board should come into those cases?---It would be impossible for us to police all breaches, but in many districts or, I should say, in a number of districts the fire control and brigade officers do assist the local authority by pointing out breaches, or where breaches have occurred, so that the local authorities' officers can make investigations of them. It does not often or necessarily point back to an individual officer as "putting him in", if we can use the term. In many districts the fire control officers visit and contact the

offenders and tell them where they have gone wrong and help to keep them acting under the Act.

I am not thinking of cases where a man unwittingly breaks one of the conditions, but rather where a man deliberately fails to notify people who are going to be in danger as a result of his actions as the fire gets away?---Investigations by the police have been most helpful in a number of districts -- in carrying out investigations of breaches of the Bush Fires Act.

When do they carry them out; At the request of the local authority or at the request of a local resident?---At the request of the local authority usually.

Does your board ever request them to carry out any investigation?---Not to my knowledge; not the board itself.

BY MR. McARTHUR: You refer to zone 2, the Margaret River area. How many zones or sub-zones are there in the State at certain prohibitive burning times? If you cannot answer that could we be provided with a map showing that?---I can provide you with a list of the prohibitive times, a schedule showing all the various road boards and municipalities and their commencing and concluding times. It may be a little bit more difficult to provide a map showing the split-up.

I think the schedule would be quite sufficient. The other question, which is probably included in that, is: Which districts varied their commencing date from what was laid down in the original times; such as Margaret River, which put forward its commencing date by two months. Would you have other areas shown?---I don't quite follow that -- "Put forward their commencing date by two months"?

You say that for zone 2 the prohibitive burning time was the 27th October to the 26th February?---Yes.

You say that the commencing dates for the Margaret River district was the 27th December, 1960?---That is so.

In other words, that was a local variation brought in by the local authority, is that right?---No; that is the time fixed in this schedule of time. They are all considered on the different districts, whether they are wet or dry, and even though this one comes into zone 2, apparently the Bush Fires Board has considered - after the local authority has apparently applied for a later commencement of the prohibitive season, this has been granted. I think you will find there are other districts in this schedule that have later commencement dates than the 27th October.

That is what I wanted to know; thank you. One other point: It is quite noticeable in all your descriptions of these fires that none of the fires escaped on the actual date of the permit for burning; they escaped some days later. In the case of the escape in the Karridale district, do you consider that if an efficient bush fires brigade organisation had existed there it would have been reasonable for that organisation, when they realised that a serious fire existed, to provide patrols for those property owners who had already burnt off; or conversely, whether property owners should have requested the brigade to provide them with extra assistance to make sure that those fires did not escape?---It is a possible answer. It is a question of whether the brigades would be strong enough in personnel to cover all those fires. It is usually left to the farmer to engage his own fire fighting, or forces, and to keep them there with him for as long as he considers it necessary. In some districts practically all fires are put through on a fire brigade basis; the brigades actually put the fires through. But that does not necessarily mean that the brigades stay and control the fires. That usually comes back to the farmer himself to control the fire once the brigade leaves.

You, yourself, have said in evidence that it is possibly more important to provide more patrol after the fire than on the actual day of the fire?---That is so. It is very difficult. We find the greatest difficulty is in getting people actively to patrol the fire perimeter after it has been put there - not for one, two or three days, but for as long as anything is burning close to the firebreak or the boundary of the burning area.

BY THE COMMISSIONER: What is the practice during those patrols? Are those men there simply to patrol a fire and throw in burning ends, or do they work during that period with saws, falling any trees near the edge which may be alight?---It could be both: They could be there to see that the fire does not escape and they could be working on a fire itself carrying out clearing operations.

A very wise practice, I should think; you never know when the weather will change. If there were fires near the edge I think it would be a first priority to get them out?---That is so. I understand, in regard to the Karridale fire, although the owner was on the location of the fire he was not at the end where it escaped.

BY MR. OATES: You mentioned the general apathy by many farmers and residents towards bush fire brigades and fire control and prevention in general. Knowing the Karridale area and the type of farmer there, and the normal climate, would you think that has contributed to their apathy to bush fire brigades? With their normal climate, their fire hazard is not very high. This was an abnormal year, and I was wondering whether those conditions could have led to the general apathy in that area?---I should think they would undoubtedly have some bearing on the apathy of those people to fire control and prevention. In districts which are more prone to fires commencing and burning rapidly, we find there is no apathy at all but that everybody is in the brigades and is actively concerned with fire control and prevention. It is possible that the nature of the district, and the weather pattern there have had that effect.

You refer to dirty bush lands and there is a recommendation here for a firebreak around the boundary of these bush lands. I am thinking now mainly of the absentee owners of these bush lands which you have admitted are a hazard. Would you think that rather than a blanket regulation in relation to a firebreak, a more effective means of protection would be a condition obliging these people to carry out protective burning? Would you not think that because of the very heavy nature of the bush an ordinary 10ft. firebreak would not provide as great protection as a protective burn? Spring burning would be more effective than a firebreak?---I do agree that protective burning is necessary. But it is often very difficult to get an absentee owner to do that, whereas we feel it may be easier for him to get a contractor to put in a 10ft. break. At least it is a start rather than the finish. But I do agree that these properties, if possible, should be burned out or have burned breaks of a reasonable width as I think I have mentioned somewhere -- a 10 chain strip around them.

The question I am now about to ask you applies to Karridale. The Karridale farmer is in a fairly small way and is not highly mechanised. I am doubtful whether many of them would have private power pumps. They would probably be mainly knapsacks. Would you think that in this type of district subsidisation, for equipment of this nature, by the local authority might be an advantage?---It would undoubtedly assist, but I feel the first thing is for the brigades to completely organise themselves and commence to get something. I feel sure that if that were the case the local authorities would possibly consider assistance. I think the first move must come from the farmers themselves in their own organisation through their brigade meetings, etc.; and then if they were to advise the local authority of the means they were taking, and ask for assistance, it would considerably help.

BY THE COMMISSIONER: These people constitute the local authority, don't they? If they cannot afford to buy equipment, can they afford to pay the extra rates the local authority would need to buy the equipment for them?--- I am not - - -

You cannot answer that question, I know, but it is something that comes into the answer of the question you were asked?---It does. I would like to mention this: Some of the ratepayers in one of our districts have been asking for suitable heavy duty equipment, and I am given to understand that their rates are particularly low. Yet that district still has no centrally operated fire fighting equipment.

Is there anything else you wish to add to your evidence?---No.

I would just like to mention this point: You were speaking to a report that you had put up for your own secretary's information, and it was some time ago, so I quite understand why you might have had a little difficulty?---It is also a more or less composite report.

(The witness retired.)

THE COMMISSIONER: I would like it recorded that Mr. Wallace of the Forests Department has asked for Exhibit “F” to be returned to him for amendment; the exhibit to be later returned to the Commission.

THE COMMISSION ADJOURNED

MONDAY, the 15th MAY, 1961

JONATHON BUSHBY,
Semi-retired Farmer,
Karridale, sworn and examined:

BY THE COMMISSIONER: Are you a landowner?---Yes.

Could you tell us where your property is, giving the location numbers?---Yes. My place is portion of Location1939. I sold the balance of the property to the War Service Land Settlement.

You have prepared a statement of evidence?---Yes.

Would you proceed to read it?---Yes.

Evidence of the Karridale fire of March 3rd. What I would like to know, there was a total ban on all fire lighting on the 2nd March, yet the Forestry Department lit the bush a distance of over a mile, three-quarters of a mile from the main fire without sufficient men to control same, when if they had gone to the head of the fire to do same, the disaster that struck Karridale and district to my way of thinking could have been avoided. Approximately 15 farms were burnt out from the fire that they fired.

Unless you have altered your evidence, what you are reading is not the same as I have here?---Approximately 15 farms were burnt out from the fire that they fired. That is on the backburn.

You have changed your wording, have you?---I might have.

I patrolled the fire about 8 o'clock a.m. 3rd March. No-one was in attendance that I could find. Trees were alight right up to the road that they burnt back from. Where the main fire got going on Friday morning about 6 o'clock and went through the old pine plantation which was burnt out about 16 years ago, and the karri forest which was littered with bush and scrub, there was no hope. The chains of backburning that was done in the spring was useless. Also, why was the order given for evacuation issued?

What is on the bottom of your copy? I have not got it here.

BY THE COMMISSIONER: This is what you have on mine:

> Why was the order given for evacuation issued; and by whom? And why was the Forestry bulldozer rushed away from the fire and left at the crossroads? There is quite a number of other things that could be cleared up.

You wish to tender that in evidence?---Yes.

I understand that you are a fire control officer appointed by the Augusta-Margaret River Board?---Yes.

How long have you been a fire control officer?---Ever since the brigade was formed. I just cannot tell you the number of years, but about 9 or 10.

Are you physically agile?---I hope to be. Yes, I am.

Would you mind telling us what your age is?---My age is 71.

You are doing very well. Are you a member of a fire brigade?---Yes.

As well as being a fire control officer?---Yes.

Are you an officer -- a captain or a lieutenant -- in that fire brigade?---No. They are appointed differently from the fire control officers.

As a fire control officer, do you recall -- approximately will do -- how many permits you issued during the period immediately after the opening of the season for burning?---I issued four and cancelled them.

On what day did you cancel them?---I issued them on the 1st March and cancelled them on the same night when we got word from the bureau that there was going to be a dangerous day next day. There were no fires lit in the Karridale area or burning in the Karridale area that got away from any farmers in that area.

You did not issue any for burning on the 27th or the 28th February?---No, I would not issue any because the weather was too dangerous.

When did you learn of this fire that swept through Karridale?---That would be on Thursday.

Thursday was the 2nd March?---Yes.

How did you get the information?---We got the information from men who came from one brigade to the other.

You do not know who they were in particular?---We got a phone message at 4 o'clock from Forest Grove to send men to this fire. We were at a fire which had jumped over the Alexander Bridge over the Blackwood River, and it was burning on the east side of Karridale. On Wednesday and Thursday we were fighting there -- all night on Thursday. We got word to say, "Send some men". I was going to send six down, but by the time we got down there was an order countermanding that. The Forestry had got there. That telegram was delivered by a boy from Mrs. Kerr's place.

About 4 a.m. on the Thursday morning?---On the Thursday evening.

And then, when did you learn that the ban had been imposed on the lighting of fires?---That came over on the wireless about dinnertime on Thursday.

Where were you at that time?---Home, at the house. We came for tea.

Did you know when this ban started from?---I could not tell you, but they made a total ban on fire lighting in the district. That was what came over on the wireless, at any rate.

When was the ban taken off?---I could not tell you. The wireless message said that it was the total ban for the day. They issue a warning every morning.

Had not they given it for a definite period?---Through the day, if the ban is lifted at, say, 2 o'clock, we are notified that the ban is lifted. You can find that out from wherever the information comes from.

You did not find out when the ban was lifted?---So far as I can gather it was still on at 5 pm. Several farmers said that the total ban was still on.

You expected it to be on until the next morning?---Until we got information otherwise.

As far as you know, it is still on?---We know it is not on now. When it is on for one day, on the next morning, when the news comes over the wireless, we know then whether it is off. That is the only thing we can go by.

When did you first arrive at this fire that was coming down from Forest Grove way?---About 8 am.

On the Thursday?---No, on the Friday. We were fighting our own fire on Thursday, in the east.

Did you take any equipment to that fire?---No.

Did you take any men?---No, not when we went down.

Did you suffer any loss in the fire?---Yes, I lost everything except my house. I lost my utility, belonging

to my daughter. I lost my main shed on the road, my garage, and all my buildings on the place; my shearing shed, and everything else. I lost my 40 head of poultry and the geese.

What about fencing?---No, the fencing was quite all right. It was practically new fencing. There was nothing that I could not put up myself. You see, I had steel posts.

Do you know where that fire started?---It was supposed to have started from Mr. Holland's place.

I would like you to say if anything you are saying now is hearsay?---We heard that it started from Holland's place; we also read it in the newspapers. As far as I can understand I never had any proof that anybody helped it along except where it was burnt by the Forestry Department on the Thursday evening.

You say that the Forests Department set fire to the bush in an endeavour to make a back burn?---Yes.

How did you know where the line of that back burn started?---Because they came along the road.

About 8 o'clock am, when you went along there, you said you could not find anybody?---I could not find anybody as far as I went, but the fire was getting that bad at that stage, the only thing I could do was to get home. I knew what was going to happen at 6 o'clock when I got out of bed. I have been fighting fires since I was six years of age.

When you went along at 8 o'clock am you could tell where the back burn had started because there was a track there?---Yes.

Was there any fire over the track there then?---Not on the south side.

The back burn was held up to that time?---Yes.

You say it was three-quarters of a mile from the main fire?---Yes.

How did you know when they lit the back burn?---It is the best part of a mile from where the fire was until we got to a place what we call Slabby Ford. There was still no fire there because it had been Spring burnt.

J. BUSHBY,

15/5/61.

Pks/Bly. 209.

Are you sure it is as far as that?---Yes, I am quite sure of it.

How far did you say it was?---About three-quarters of a mile. It is just over three-quarters of a mile where the fire was until where the break was. I have a bit of a map here. Could I explain it to you from the map? (Witness explains the position from the map).

You say that they should have gone to the head of the fire to start this back burn?---To my way of thinking, yes.

How far to the head of the burn do you think it would have been safe to go to set a back burn of that nature?---They could have got very close to it because the fire was burning on a point.

I understood you to say that the fire was three-quarters of a mile away from them?---Yes, but the fire was burning in a south-westerly direction.

You think they could have gone much closer than they did. You are not prepared to give an estimate of the distance of how close they could have gone?---You would have had to have been in front of the fire to find out. There was a grave error of judgment made. However, if I had fired the area I would have never fired the area where it was fired.

But you were not in front of the fire so you do not know?---No, but I have been fighting fires for years.

You did not know how hot that head of the fire was?---No but as I told you before, I have been fighting fires for many years.

Do you know what actually happened with their back burn? Was it outflanked, or did the fire come over the top of it?---As far as we could see, it was outflanked and came over the top.

But the part you saw at 8 am had not come over. You think it came over later?---Yes.

How do you know that?---Because the main fire was in Karridale and it sort of started on an angle. I can show your officer from the map so that you can understand what I am saying. (Witness explains track of fire on the map.)

MR. McARTHUR: Mr. Bushby has indicated that the fire which burnt Karridale came from the vicinity of Part 1087 and burnt in a southerly direction. At 1.30 p.m. another fire burning in the south easterly direction burnt through towards portion 944 on the Brockman Highway. He has indicated on the map that the second area has come away from the vicinity of back burn.

BY THE COMMISSIONER: That expresses what you are trying to convey?---Yes.

Do you know if any attempts were made to attack the face of this fire as distinct from burning a back burn?---I am not sure; that is in the Forest Grove brigade area.

From the time it entered the Karridale district do you know if any attempts were made to attack the face of the fire on the western side of the road?---Not by our brigade, but the Forests Department was working there all the time, since the time they went to the fire at Mr. Holland's place.

Do you know what men and equipment the Forests Department had there?---No, they had two bulldozers.

You say the fire burnt through the plantation which was burnt out about 16 years ago?---I cannot give you the exact year. It burnt me out at the same time.

As a matter of fact that plantation has been burnt out since then?---I cannot definitely state the number of years when it was burnt out, but it got into the old plantation again.

You say the back burning done in the spring was useless. Why was that?---There was more back burning done with our brigade than ever before. I mean the burning of bush back from our properties. We walked down to see if we could find somewhere to stop the front of the fire from coming on. We walked right down to the railway line and at least three to five chains had been burnt back. There was a bit of private property, but I do not know to whom it belongs. We thought that would be all right, but the fire went further

and burnt through it as clean as this table. Everybody else had the same experience. It was the same in front of Foster's place when the fire came through at 1.30.

What is the location number?---No. 1353.

So you had some back burning done north-west from location 1353 and out to the west?---Yes.

You speak of an evacuation order which was issued. From whom did you get that?---We did not evacuate anybody; the police did it.

It was a verbal order?---I do not know whether it came from Perth or where it came from. I met Mr. Collins and was talking to him for a minute and a gentleman came up from Busselton and they had a conflab on their own and I heard him say, "We will have to make this an emergency." They then disappeared and there was an order issued for Karridale to be evacuated. From where it was issued I do not know.

Did you see any objection to evacuating people from Karridale?---There should never have been an evacuation. They evacuated my wife from the house five minutes before the fire struck. There was absolutely no danger to the people. You might think that because I am 71 years of age I am not capable of doing this, but I fought that fire. I am a bit of a tree lover and I have a lot of trees around my place which I would not cut down for anything. When the fire struck the tree it was about 40 feet high.

I want you to know that any questions I ask you do not suggest that you have done anything wrong. It is only to get the facts?---I understand.

I am interested in your opinion that the people should not have been evacuated. What would you have done with the people?---As the fire goes past the people could come out again. That fire passed over the house in four minutes.

None of the houses got burnt?---Where the people panicked and ran away every house got burnt.

It was only a matter of being there and keeping the fire away from the house. Is that what you mean?---That is so. It was not the main fire; it was only a matter of the trees catching alight, and it only required people to throw some water on their weatherboard houses to check it. The evacuation order should never have been issued, and the store and the hall should never have been burnt down. It would have been enough had there been only two men there, but they evacuated every man, woman and child.

Did they also evacuate the men?---Yes.

How would the old Karridale hospital have got on?---It was in the big pine trees and a spark from half a mile away could have ignited that. It could have been lighted from a mile away. There was a bitumen road 12 feet wide in front of the fire and no man need have run away from it. There was plenty of protection. The fire was coming on an angle to it.

You mentioned the fact that the forestry bulldozer was running away from the fire and was left at the crossroads?---The two bulldozers came along the road and I asked the drivers where they were going and they said, "We are trying to find a clear place in which to park." I said, "You are going in front of the fire to find a clear place to park?"

I further said, "Why not help the farmers". I could not order them in. They were Forestry bulldozers.

What crossroads were you referring to?---The crossroad where they evacuated everybody at Karridale, near the Catholic Church.

You are sure they were Forestry bulldozers?---I am sure. There were Forestry men working on them. They were not private bulldozers.

If they were not belonging to the Forestry they were engaged by the Forestry?---I am sure of that.

You say there were 15 houses burnt. Could you enumerate them, which were burnt as a result of that backfire?---They were all farm houses, and they were as follows:-

George Smith
Marcovitch - 2 houses burnt
Alan Collier
The Public Trustee house belonging to a deceased estate
P.J. Price - Milking machines, dairy and everything else
E.J. & F.J. Foster - Milking machines, dairy and hay shed
Collier at Alexander Bridge
C.H. Ironmonger - Hay Shed, milking shed and all other sheds, with the exception of his house.
L.W. Bushby - Hay Shed and other shed, but house saved

There could have been one or two others. You are aware of the Karridale Hall and other buildings in the town which were burnt.

None of those farm houses which were burnt were occupied at the time? The people had left them?---They were not in the houses.

They were not all evacuated by the Police. They were out fire fighting?---Yes, the burning commenced with flying sparks.

BY MR. McARTHUR: Referring to your map, dealing with the backburning line shown thereon, as being burnt by the Forests Department, I think you have that line shown too far to the south?---No doubt you

have been up that way. It is directly in front of the Dutchman, Mr. Vlamm's house.

I think that backburning line would be to the north of portion of Location 2076. It would therefore put that line much closer to the main fire than you have indicated. Did you realise that the fire was on the western side of Busselton Highway when that backburning was being done?---Yes.

When you indicated on the map where the fire came away from an area at 1.30 o'clock in the afternoon and burning down towards the Brockman Highway in a south-easterly direction, you have indicated that as coming from this backburning line which you have described. Would it be a reasonable assumption that that fire could have come from the whole face of the fire which had gone towards Karridale?---Not if you follow this back fire.

If you say that did not come away until 1.30 in the afternoon, the fire was almost down at Karridale, or past Karridale?--- It was past Karridale.

If the wind changed to a north-westerly direction, would not the whole face of that fire travel towards the south-east?---Not according to what I have heard from the farmers. I ordered every farmer in the brigade back to his farm at about 11.30 in order to protect his farm. That was the only thing we could do. I know this place well, that is Location 1965, next to Vlamm's property. That came at the bottom end of his property which was fenced. The way it came, showed it could not have come from the main fire. If it came from the main fire it would have had to come from an westerly direction.

It could have come from a westerly direction. Is that not what you mean?---That is right.

That would not necessarily be from the backburning line. You already have a line of fire to the west of that property?---If you know anything about the fires you would have known where that fire came from by going along that tack. I do not think I am far wrong. These people said they were safe. All of a sudden it

started up. It would not have been any more than 1¼ miles from Location 1965 to your burn. It came in at an angle, north-east from there.

Would it surprise you to know that at 11.30 the fire was only a half mile west of that burn?---It would not surprise me if it was there at 1 o'clock. You are referring to the fire.

Yes, the fire already coming down to Karridale was approximately one-half to three-quarters of a mile west of it?---I think you would be wrong. This man on Location 1965 did not leave his property. You can get a written statement from him. They were watching the fire all the time. They thought they were safe; then all of a sudden it came across the bush. There is pure sand there.

BY THE COMMISSIONER: The point is that you still maintain it was three-quarters of a mile at least?---Approximately. I said approximately before.

I do not think there is anything more you can tell us now, except that at the end of your letter you said there were a number of things you would like cleared up. We, of course, cannot do that, but if you give us some idea of the points you had in mind they might help us?---Yes. Perhaps I should not bring it up here, but actually all control was taken out of our hands at about 12 o'clock. Everyone came up. I would like to know who sent them up. I would like to know whether they called that fire an emergency. You know what I mean. They sent a man up from Perth to control everything and they sent the Police up to evacuate without any authority from the local people who know more about it, I should think.

Who do you think came along to take control of the fire?---We do not know. We asked a dozen people and they said, "Oh, so-and-so told us". But we could not find out. Not local people though.

You only have it on hearsay?---No. No-one approached me. Everyone was too frightened to come towards my house because they thought I was going to get burnt.

You do not know yourself? You are only repeating what you have heard?---The Police wanted everyone to go to Karridale. Who gave the Police the authority?

That is what you were told by someone?---Yes, and you will have your evidence.

I was going to ask you if you could tell me who could give details of a particular incident. I would like to know the name of a witness I could call. Do you know of anyone?---Yes. J. Cussack. I think you will have that in evidence.

Anything like that that you are not sure of and are only going on hearsay evidence, if you will give me the names of some people who can tell me of it, we can trace it back to its source and find out what actually did

happen without the possibility of any error?---Yes. Another thing is this evacuation from Karridale. Why did they evacuate the people to a petrol depot? Everything was wrong altogether. They evacuated people away from their own homes to place where there were 70 drums of petrol, about 40 to 50 drums of kerosene and diesel oil, and six or seven cylinders of that clear gas.

Where was that?---At the crossroads.

At Karridale?---Yes.

Of course I cannot answer your question?---Yes, I know, but this could perhaps go further from you to people in authority.

That is right. Anything you think would help to remedy the situation would be useful to us?---If they were going to be evacuated they should have been evacuated to Augusta where it was burnt out months ago. It was only nine miles away.

Did you have any other points in mind?---It may not be --

Anything which will help us to deal with this sort of thing?---Another thing is the dirty state the Forestry leave their forests in. Where this fire came through, once it was there there was no hope in life. The sparks jumped 1¼ miles.

That is land under the control of the Forests Department?---It is the old pine forest and karri plantations. That is where the big fire started.

Did you see it yourself jumping like that?---Yes. I think the furthest I saw one jump was 1¼ miles from the fire and it was not out of the bush. That was on place owned by Lloyd Crain. Another thing, too; of course we had the fire on the eastern side. What you can gather from the papers -- it was not said there -- is that fire brigades are not efficient enough. For five years there we have not had a fire in our district that has got away from any farmer. Therefore they must backburn and ploughbreak. But of course breaks that day would have

been useless because the other fire we were fighting jumped the Blackwood River three times in two days and it would be a mile in one place and three-quarters of a mile in another.

This Karridale fire came down both sides of the main road -- east and west?---No. You are talking about Bussell Highway?

Yes?---It came straight down west of the main road and came over east. The wind changed in the afternoon and it came east.

Why did it not come down the eastern side? Did they stop it successfully? It came from the east side from Forest Grove and I am wondering why it did not come that way?---Because there was no fire there until it burnt through these farms. It came straight down along the old railway line. That would be the west side of course.

The fire started at Forest Grove on the east?---Yes.

It came down in a north-westerly direction from Holland's place?---Yes. It hit the main road and jumped it.

Did it not stop on the east side as well and come down when the wind changed?---That fire on the east side did not join in with the west side.

If the judgment ever came up I would be quite prepared to show them where this back burning was, and the forward burning.

THE COMMISSIONER: Thankyou.

BY MR. HALE: What equipment has your brigade?--Most of them--practically every member of the fire brigade has a knapsack spray. There are three pumps fitted on to the back of the tractor--the pump for spraying the wogs; Mr. Collins will tell you they are very efficient. He had a demonstration for us and said they were quite sufficient for our brigade.

Has any equipment been supplied to you by the local authority, or have you received a subsidy on any of it?--When they first started the brigade I think there were three knapsack sprays free and two of those rakes.

Fire rakes?--Yes.

Did all the members of your brigade have fire breaks constructed around their property and buildings?--Most of them have; not all of them, but most of them have. Anybody that wants to burn, they generally have.

But they don't put them in?--It has not been compulsory, no.

How often does your brigade have a meeting?--Twice a year.

Every year?--Every year. The election of officers is in October, and then they have a meeting just after the fire season is over.

Do you plan any operations at these meetings, or is it purely for the election of officers; do you plan any burning?--Anything that any member likes to discuss is discussed and we try to plan out how it should be done, and everything like that.

Your protective burning: Is it done by the brigade or individuals?--By individuals. If a brigade wants to do it, they do it; but we have not been in that position to have to do it. Everyone has been directed by the road board and by fire control officers in the district that you must back burn every bit of bush which can be burnt

outside your property, or bad pieces of bush you have in your home property. It was the best burning we ever had since I have been a fire officer; but the day was against everything.

THE COMMISSIONER: There is just one thing more: This discussion which you and Mr. McArthur had about the fire in the east; I will get Mr. McArthur to put it into words and you will tell him whether he is correct.

MR. MCARTHUR: Mr. Bushby has described the fire which came from portion 1650 as having moved in a southerly direction towards the south-eastern part of portion 1965, and then in a south-easterly direction across McLeod's Creek Road.

BY MR. MCARTHUR: I am describing the fire as moving in a south-easterly direction?---That is correct.

MR. MCARTHUR: Mr. Bushby further describes the fire originating from the back burning operations as having burnt in a south-easterly direction through location 1965, continuing through 1964, 1956 through to the Brockman Highway in the vicinity of 1539, and having then moved in a south-westerly direction. Mr. Bushby further says that when the wind changed to a north-westerly direction the fire which had burnt down through Karridale then burnt across the Bussell Highway.

BY MR. MCARTHUR: Is that correct?---That is right.

THE COMMISSIONER: To the east side?

MR. MCARTHUR: To the east side.

THE COMMISSIONER: I think that is all we can expect to get from you, Mr. Bushby, at the present time. If there is anything else which we wish to clear up, will we be able to get in touch with you?---Yes; I am either at home or in Perth. I will let you know if I come down. Thank you.

(The Witness Retired.)

J. BUSHBY,
15/5/61.

CHARLES HENRY IRONMONGER,
Farmer,
Karridale, sworn and examined:

BY THE COMMISSIONER: What is your full name and address?---Charles Henry Ironmonger, Karridale.

And your occupation?---Farmer.

Are you a landowner in the district?---Yes.

Would you tell us what property you own?---1944.

That is the number of the location?---That is the number of the location.

Have you prepared a statement of evidence for the Commission?---Yes.

Would you read it, please?---Yes.

C.H. IRONMONGER,
15/5/61.

On Thursday, 2nd March, 1961, the Forestry lit a fire half a mile south of Slabby Ford, Location No. 1650. This fire was supposed to create a brake against a small fire which was coming in from Forest Grove, but it only aggravated the position for three reasons --

1. On that day a dangerous fire hazard had been declared and it wasn't absolutely certain that it would do any good lighting the fire.

2. The fire was lit in the wrong place, a north-east wind was blowing at the time and the fire couldn't burn in any other direction except with the wind, and that is contrary to any brake burning practices. There was already a brake at Slabby Ford which had been burned before Christmas and was quite safe as was proved later as none of it was burned during the big fire, tree tops and scrub will show this. As a north-east wind was blowing the fire should have been lit near the West Coast and burned back. This fire as stated earlier was started on Thursday, 2nd March, in the late afternoon. Some men from Karridale went down to investigate the fire, they were told to clear off as the Forestry men could handle the job with the dozer and equipment they had. However, before the fire had gone very far it was out of control and the bulldozer bogged trying to cut off the fire. The fire was left all Thursday night without any effort being made to make it safe till the next day, when 50 men could have helped all night if necessary and had it under control by morning. No! The Forestry were bent on doing the job themselves. Consequently, Friday opened up hot at 6 a.m. and the north-east wind freshening by this time, the fire had gone in a north-east direction towards the coast for about two miles, and it only needed a small change of wind direction to north which always happens at this time of the year and it happened again to give the fire a two or three mile face in forest country which has not been burned for 10 years to the day. If the Forestry wanted to burn from the main road the fire could have been started on the edge of Buller's property - (We can get the Location No. later) - where there is a lot of cleared land in pasture and the fire could have been controlled from there reasonably easily. The Forestry men were trying to save Government pines and burnt out Karridale instead.

3. The Forestry men made a grave error in judgment in lighting the fire during a dangerous fire hazard. Even if they had the right to light they didn't have the equipment or manpower to do a big job like that in a dangerous time or it wouldn't have got away.

The Forestry wouldn't take advantage of the manpower that was offered when it could have been of some help. At this stage the wind went north, consequently everyone in Karridale knew we were going to be burnt out. I, unfortunately, was the first to suffer a big loss, though the fire came through three other farms before it reached mine, by the time it hit me a very strong hot north wind was blowing and fires were starting half a mile of more in front of the main blaze. If there had been 50 men on my place I don't think we could have saved any more than we did. I had made a fire brake which no ordinary fire could have got over, 10 acres of ploughed land on which I had my sheep - 500 - and cattle, none of which I lost during the fire. Some have died since because I have not had the new paddocks to put them on.

I have lost three miles of fencing which was sheep and cattle proof before the fire - bull pen, shearing shed, hay shed, which would hold over 50 tons of hay. 35 tons of hay burned, calf feeding shed, tool shed, store shed. Dairy and cow shed roof, chaffcutter, corncrusher, engine and milking machine, chicken house, part shearing plant - apart from other economic losses such as freight etc. on feed which I have had to buy - loss of sheep, working long hours, in fact it has been slavery for me and others since the fire. There doesn't seem any end to it for a long time unless the Government does something about it.

After all, this fire was none of our seeking. There was not a fire in the Karridale district until the Forestry lit up, not to save us but to try and save a few acres of pines which should never have been planted there. Sixteen years ago the Forestry had a plantation burnt out in the same way and yet they go on planting without making adequate plans for protecting them. If forests are burned over every two years this sort of thing could never happen. As it is all young saplings are burnt off with such a fierce fire and regrowth will be retarded for at least 10 years.

I, myself, was badly burned on the leg for which I received medical treatment for six weeks. I consider I shall be out of pocket about £2,650 all told. I have received insurance money £650, leaving a loss of £2,000.

BY THE COMMISSIONER: Attached to your statement I have statement by H.L. Crane, of Karridale, and another by C. Vlam of Karridale. Do you pass those in as exhibits?---Yes. I understand the Farmers' Union have a man down there collecting and collating all this evidence, so I handed the originals over to that person.

Do you wish to put these two statements in as exhibits?---Yes.

Are you a fire control officer?---No; I am just a member of the brigade.

The same brigade as Mr. Bushby?---Yes.

Have you got more than one brigade in the district down there?---We are in small districts there, and there is just this one fire brigade in the Karridale district.

Who owns location No. 1650?---That belongs to a chap named Potter. He is just opposite the forestry. I put that in so that we could pinpoint the forestry part.

It belongs to Mr. Potter; it is not Mr. Vlam's?---No.

You say that on that day a dangerous fire hazard had been declared?---Yes.

What can you tell me about the declaration of this fire hazard?---It came over the air as far as I

understand. I did not actually hear it because I was not listening to the wireless that day; but two fire officers said a dangerous fire hazard had been declared. One of those officers was the fire officer from Kudardup who came to our meeting, and the other was Mr. Bushby. Several others also said there was a dangerous fire hazard, and I saw no reason to disbelieve them.

You did not hear it yourself?---No, I did not. I did not listen to the wireless that day.

You do not know what time it came over?---No.

Do you know when it was revoked?---No.

Do you know if it was put on for a definite day?---No. As Mr. Bushby said, when a fire hazard is declared it is declared from day to day. If a fire hazard is on, it is on all day, as far as I know, and tomorrow there is a fresh declaration as to whether it is on or off.

Did you see this fire lit?---No, I did not actually see it lit, but I saw the smoke going up.

How do you know it was lit by the forestry people?---Mr. Vlam lives just opposite, and it was just opposite his door.

And he told you?---Yes, and other people, too - Mr. Crane. He was down at the fire and he wanted to know if they wanted any help and he was told they did not; that he could go home; they could manage the job on their own. There are several other people who will be giving evidence.

You cannot tell me who told him that?---It was a forestry officer, but I do not know his name.

Not one of the men?---A forestry man.

Was he an officer of the department, or a workman?---He would be one of the forestry gang there.

You do not know who it was who told Mr. Crane they did not want him?---No, but he will know.

You do not necessarily know that they used the words you have here. They left a bad impression in my mind. I was wondering if they used those words?---Those are the words that were given to me - "To clear off home."

They were the words that you were told as you have expressed them here?---Yes.

You do not know whether that was the officer in charge or one of the men? All that you understand is that it was one of a Forestry gang?---Yes.

When you say that this fire was lit when it was only a small fire coming in from Forest Grove, had you - - -?---It did not appear to be a fierce fire. Since 1944 I have had a clear view of the country north -- where the fires were -- and judging by the volume of the smoke that was going up it did not appear to be a large fire until later when the fire was lit on the main road. I knew that someone had lit it and that was where the Forests Department had started to backburn. The fire did not get any definite direction until it got into the sky a little. It is pretty hilly country there and the ground wind would probably be different from the wind 200 or 330ft. higher. When the smoke went up I could see it was blowing in a north-easterly direction. In a north-easterly direction from the main road it blows out to the coast. From the main road I inspected where the people had lit this fire and saw that it goes in a westerly direction towards the coast and turns north in one place. That is probably where the fire, lit by the Forests Department, was. It goes in a north-easterly direction and it had crossed the road where it went north.

Do you know what size the fire was that came from Forest Grove when they let the backburn?---No, I did not see it.

Do you think it covered anything like 5,000 acres?---No.

It had been burning for a couple of days you know?---Yes, but it was very scattered. It had travelled a long way and it had not covered a block or area in one body.

Have you any idea of the acreage that had been burnt?---No, I have not.

So it might have been a fairly large fire?---It could have been.

It is important, of course, whether they put a backfire against a large fire or a small one?---Yes.

Where were you when you received notice of this fire being in existence?---After I saw that smoke going up on Thursday I was not far away from my own place. In fact, as the crow flies, it would not have been above a mile and a half from my farm.

How far do you say the main fire was when they lit the back fire?---It is hard to judge; it is probably a mile.

How far would you say it was from where they lit the back fire up to Slabby Creek?---Anything from a mile to three-quarters of a mile.

I think you said about half a mile here in your statement, if I remember rightly?---Yes, well I still say half a mile to three-quarters. Unless you measure it, a quarter of a mile is neither here nor there.

Do you know whether the back fire actually got away from where it was lit or whether the main fire got over the back burn?---They put it out so they must have. The bulldozer was there and they got it bogged. There was evidence where they bulldozed the trees down to make a track.

But do you not always try to make a bit of a trail from where you make a back burn?---It all depends on the nature of the undergrowth and the nature of the ground. When you come down to that country -- and the evidence will still be there -- you will see where the fire burnt jointly that the tops of the trees are still green.

You are still speaking of the back burn?---Yes, where the fire got away there is no green on any of the trees; that will be there all winter.

That does not indicate to me that they were necessarily burnt by the back burn. Why could it not have been the coming fire that jumped the back fire?---The coming fire did not jump the back burn.

You say it got away because the trees were severely burnt close to the back burn?---Not altogether that because when the fire got away it joined up with the other fire coming through from Forest Grove. Of course, if you have two big fires coming together they tend to draw one another into one big fire and off she goes.

When did that happen?---Some time on the Thursday morning. As I said earlier, the fire that was lit by the Forests Department was lit when there was a north-east wind blowing and that travelled out to the south-west coast. By morning, that fire had been travelling all night. We had had a breeze all night and consequently we had no dew in the morning -- which we usually get in the morning down there -- and it must have been travelling close on to two miles during the night towards the coast. The wind had only to go round to the north a few points and you would have had a face on the fire of two miles and it got into country that had not been burnt for 10 years. I was burnt out at that time, too, but we saved the sheds and things. The two fires, about that time, must have met up. All that country has been cut over by the millers and is very dirty bush and even where the stuff has not been cut over it is very dirty because it has not been cut for 10 years. My place was lit up over half a mile from the main fire. My place was burnt before the place next door to me.

But even if the back burn had not been lit the main fire could have gone down to Karridale?---It could have, but there was no necessity to light that fire where it was lit. Two fires are always harder to control than one, and if we were going to be burnt out we might as well have been burnt out by the main fire than that fire. With the hot conditions prevailing it must have created further heat and helped the fire considerably. There is no denying that.

You realise, of course, that with any fire control methods, where there are big fires, the tactics adopted

sometimes turn out to be right and sometimes turn out to be wrong?---Yes, it all depends on the wind.

You know that old back burn at Slabby Creek?---Yes.

How wide was that?---It was a three corner patch and it burnt from the creek, say half a mile to be conservative, up the main road and then it went half a mile up the creek and it went into a triangle, if you understand what I mean. The Forests Department had a road half a mile from Slabby Ford leading west, and north, and all over the place. That is where they lit their fire on the main road. In my mind I think it was totally unnecessary.

Do you mean it was unnecessary, or do you mean that they lit it in the wrong place?---I mean it was totally unnecessary.

You did not need a back burn at all?---Not just there. According to all the concepts of fire control you do not light a back burn to go with the wind. You get ahead of where you want to burn off and burn back. That is only logical. You do not burn with the wind. If you did, you would have no control over the fire.

BY THE COMMISSIONER: When we adjourned we had reached the point where you said you could not understand why people lit a back fire when it could only burn with the wind and not against the wind. Are you under the impression that they lit a backburn on the wrong side of the trail?---It was lit in the wrong place. It should never have been lit on that trail at all.

What happened when they lit it on that trail?---The trail leads west, and there was a north east wind blowing, so the fire could only go with the wind, which meant it would go along the trail instead of burning north or south.

It is hardly with the wind, it is more across the wind?---When that trail gets 30 or 40 chains into the bush it turns due north. If that fire is lit along it and the fire is travelling with the wind, it must jump the trail. If roads cannot stop the fire, a trail would not stop it, surely.

According to Mr. Bushby it did not jump it until 8 o'clock next morning?---He is talking about a different part of the bush. That trail must have been jumped over because the treetops were burnt, and the bulldozer was trying to bulldoze a track in that position. The tracks are still there for all to see, where the bulldozer got into soft ground and could not get out. It is logical. If the fire was to jump a track at all it would jump it when it turned north, with the north-east wind blowing. You can see where it got away.

Can you tell us where it jumped the track?---I was not there at the time, but it is logical to assume from the evidence there at the moment that on the other side of the track all the treetops are burnt out, but where the track turns north on the west side of it every leaf is burnt, whereas on the other side they are still there. It must have been a fiercer fire or it would not have burnt the leaves.

It could have been the main burn?---No, it could not have been the main burn. What burned the country on the south side of the track was the change of wind again. After the big fire had gone through, the wind went

around to the north-west. The prevailing wind starts up in the north-east and you get a blow from there. It then goes to the south-west and dies out. That is what happens. Consequently when that north-west wind came in the sparks blew over the track and they went back on to the main road again and burnt all that country to the left of Fosters, and all around McLeod's Creek. It did not change until the late afternoon. The main fire had gone through Karridale by then.

This is all supposition on your part, is it not?---It is logical thinking. The time the fire went through and the time the wind changed is not supposition.

No, but you would not know what took place if you were not there?---That is so.

I am a little perplexed by the fact that Mr. Bushby said that he went there at 8 o'clock, but the fire had not jumped the backburn?---It did not jump the backburn until 3 o'clock in the afternoon.

He said the backburn did not jump the trail either?---The main fire could not have done it.

Why do you say that?---Because it was not there.

Mr. Bushby gave evidence that he saw the fire jump a mile and a quarter?---In the paddocks it jumped a mile and a quarter.

Into a paddock out of the forest?---Yes. It jumped on to my paddocks. I could easily point out to you if you were on the scene. I can see how it happened, from a logical and businesslike point of view.

What you have been saying at the moment is supposition based on your knowledge of bush fires and back burning?---Yes.

You suggested they might have started to back burn from the west coast?---That would be a better idea.

How far would you have to start from the head of the fire if you burnt from the west coast?---The fire was going out that way until the wind turned north.

How far do you think you would have to start ahead of the fire to cut it off?---I do not know how far. I was not aware of the intensity of the fire, because I was not at the head. The forestry people should have known. They have three tracks running through to the coast. They could have picked a suitable place to backfire against the wind.

From your experience of bush fires you would have some idea of how far ahead of the fire you would have to light a back fire?---I do not think very far. I back burnt a fire from about 20 to 30 chains, and got control of it.

You think you would have burnt from the west coast that day, 20 to 30 chains ahead?---It could have been so. I do not know how the roads are situated. The forestry people should have known the roads and should have been able to pick out a position. There is flat country and country not so densely populated from which to backburn.

You do not know that country particularly well?---Not that country. I know the flat part, which I have been through a number of times, although I have not studied it.

When you made the statement that the fire should have been lit near the west coast and burnt back, I thought you would have given this statement pretty deep consideration, and would have been able to tell me

what should have been done?---The main reason for my saying it should have been started on the west coast was on account of the prevailing wind. With the north-east wind blowing, if they started the fire on the west coast, they would have been burning against the wind. That was the main idea of going to the west coast and burning back.

Before the day had gone very far you knew the wind changed, and came from the north-west?---If the fire break had been put in on the Thursday night there would have been 50 men available to do the work. By morning we would have had a suitable break to control the fire.

Did anyone suggest to the Forests Department that there were more suitable ways to build a fire break by back burning than the way they adopted?---No. Several people offered their services but were refused. They did not take any more interest. They thought the Forests Department had everything under control.

When you say that several people had their services refused, I understand that Mr. Crane was one of them?---Yes.

Who else?---Pat McDonald and Doug Cross.

Those three people told you that they offered their services and they were refused?---Yes.

Would you be sure of the words used, that they were told to clear off?---That was what was told to me.

You do not know how long that bulldozer was bogged?---No, but not very long, because the place was not very deep.

How far from the main road where it was bogged?---Perhaps 40 chains.

You said the forestry men were not working on back burning on Thursday night. What were they doing?---I do not know.

How do you know they were not working on back-burning?---I do not know.

You do not know whether they were not working on backburning?---No. Evidently they could not have been doing much, otherwise they would not have to make a call for help.

You said in your statement that--

> Consequently, Friday opened up hot at 6 a.m. and the north-east wind freshening by this time, the fire had gone in a north-east direction towards the coast for about two miles.

What do you mean?---The fire had gone from the place where it was lit the previous night.

Gone back against the wind?---No. The wind was blowing in a north-easterly direction towards the coast. They lit the fire near the main road, and with the north-easterly wind behind it the fire had gone towards the west coast.

You say in a north-easterly direction?---The wind was coming from the north-east.

You did not say that. You said the fire had gone in a north-east direction?---Standing on the main road it would have to go in a south-west direction--the opposite way. I am wondering if you are confused about the points of the compass?---I am not. The fire would go in a north-easterly direction from the road with the wind behind. It would travel south-west.

Do you have difficulty in reading a map and the point of a compass?---No.

What you really mean to say is that the fire went in a south-westerly direction?---Yes, with the north-easterly wind pushing it along.

C.H. IRONMONGER,
15/5/61.

You speak of forest country which has not been burnt for 10 years?---Yes.

Can you describe approximately where that is?---Yes. All around Boranup southwards along the bottom of the hills. Of course, there is some private country there, too.

They had a fire in those parts about 1956?---About 10 years ago.

Less than that. There was one about five years ago?---Not a bad one, sir, only a little fire.

I think it burnt through the plantation and through the karri country?---It was burnt out about 10 years ago and has been there ever since and the last big fire there was not less than 10 years ago on about the 2nd March.

You do not know how far the fire five years ago burnt?---It could not have been burnt very far.

It is below that fire you are speaking of?---Yes.

You speak of starting a fire from the edge of Buller's property?---Yes.

Which Buller is that?---It would be location 1353.

Do you know his christian name?---Ray Buller. On the north side of his property the bush had been burnt to a considerable extent. He had quite a big area of cleared country and a suitable firebreak could have been put in there which would have prevented a lot of that bush country being burnt. It could have brought the narrowness of the fire down to less than a mile from the bottom end of his property where he had bulldozed to the sandhills.

Yes, but the sandhills would burn?---Some burnt as bare as this table, but others have nothing on them at all. But on the sides of the hills is a lot of scrub and stuff and of course when the fire gets in there and it has not been burnt for a number of years it is like a fire being in an elevator or tunnel. Of course the hills draw the smoke right up in the air and it goes over like a big umbrella dropping sparks and bits of bark and all manner of things.

What part of the fire were you dealing with? Whereabouts were you in contact with the fire?---I did not get in contact with it until it came on my property. I was trying to protect my hay shed and things. I had a tractor and three 44-gallon drums and a pump on the tractor. There were several other men with fire sprays and in the finish there were a number of people there but we could not save it.

Did you lose your house?---Everything but the house. I had 10 acres of the fallow ground around the sheds where I put all my sheep and cattle. I did not lose any animals in the fire and I took all precautions against an ordinary fire.

This was not an ordinary fire?---No, this was not an ordinary fire.

So you do not know what happened east of the Bussell Highway?---No. I do not know anything about that, sir. But one observation I would like to make if I may and that is that a lot of this big fire could, I consider, have been saved if the fire had been dealt with when it got to the main highway from the east side. There is an excellent place there that could have been burnt back. In fact it is hard to understand how such a big fire could have got over the road without being controlled if everyone had the business at heart as they should have had.

I do not know how much you know about it but did it jump from some considerable distance across the road?---I do not know. It is nearly all pasture along that road and if it jumped the road you could not help but see it and a fire on the pasture could easily be dealt with.

From what I have seen of the pastures in that country they carry a lot of dead trees?---There are some, sir, but I do not think there are many normal grass fires which the farmer cannot put out.

But if a tree gets alight it cannot be easily put out?---No, that is our danger. But with all the forestry equipment, they could have controlled it before rather than when it got on the west side of the road.

Do you know if they tried to control it there?---I do not, but I think a very determined effort should have been made there and I have an idea it would have been done if there had been enough manpower. It could not have been a very big burn.

When you say that, have you any idea of the frontage on the road?---On the opposite side of the road there is not much of it burnt so it must have gone over on a narrow path. Looking at the map I would say it would be somewhere on Location 2710.

Yes, that is quite understandable that it went over on a narrow path but it might have approached the road on a broad front and it would have been a job, may be, to hold it all. But if you were not there, there is much use in pursuing the point?---No.

You say you cannot understand why the Forests Department continues planting at Karridale. It is a long time since they did any planting, is it not?---They have a small plantation out there now, haven't they?

Do not ask me. I am asking you?---They have about 25 acres there now.

I am wondering why you say that they go on planting without making adequate plans for protection?---They still have a plantation. Why not wipe it out and be done with it?

I cannot answer that question. You do not know if they are planting now?---Not at the moment they are not.

Not for the last few years perhaps. You say, "As it is all young saplings are burnt off with such a fierce fire and regrowth will be retarded for at least 10 years". Do you mean that the saplings up to 10 years have been burnt down to ground level?---Yes. Only spikes are left in the ground.

You are not referring to the rate of growth of the larger trees that were killed?---No; just the saplings; the regrowth.

Do you think regrowth is of much value?---You have to keep up the regrowth for the continuation of the forest.

That depends on the method on which you are falling your forests. It is not unusual for Forests Departments to sacrifice the regrowth if the regrowth is not of a good type. That regrowth we are referring to would have followed a fire 10 years before?---Could be. But this was the fiercest fire I have ever seen through this forest.

I know this part of the country. It has a fairly dense crop of large trees on it?---Yes, in parts; I have some myself. It is very difficult to clear that class of country and keep it clean, owing to the density of the timber; and as far as I can see, the only way of keeping that reasonably clean is to break it up into areas of 200 or 300 acres and bulldoze light ridings through it and make quite a light window to get up sufficient heat so that you can get a fire, otherwise you can't get it started in this dense bush -- only about once in every five or six years. I was trying on mine this last year until two or three days before Christmas. I was falling stuff and lighting it and it burnt a bit, only up to the size of this room. That hadn't been burnt for seven or eight years.

When was that?---Just before Christmas; about three months before the fire.

Isn't that in the prohibitive period?---We were told to burn any way we could if it was safe to burn. All the pastures were green and the fire couldn't get away.

Do you get permits for that burning?---No. The fire can't get away and you burn when you think you can make anything safe. We have to use our own judgment. If we make a mistake it is our blue. There was no chance of making a mistake; it wouldn't burn; you couldn't get it to burn. I spent three days on it. I knew that

if it went up we would be in for trouble.

How close to Christmas was that burning?---About a week before Christmas.

There were fires in the State at that time?---Yes; there are fires in the State nearly all the year round, in different parts. You wouldn't get a fire to burn down our way -- no chance. One year I did get it to burn. I had a bit of bush bulldozed. I put a fire on it in December and it burnt a bit.

Would you suggest that the prohibitive period starts too early in your district?---It does, very much. I think if they left it open until a week before Christmas and kept it closed until about not earlier than the 25th of March, I think that is plenty of time to open the burning season.

The 25th of March?---Is plenty early enough. I would sooner see it the 1st of April -- in our district, south of Margaret River area, anyway. The people who live in the district know the season in and out, with a very small variation; we know the prevalent winds, the times of the year, and we can more or less gauge what is going to happen by the season. We are people who must think these things out; we must do.

Why do you not get the prohibitive season extended?---We are going to try. The Road Board members are fixing it. We have got a committee who are advisers to the Road Board and we are going to ask them to be given power to fix the fire date. There is a big variation in climate over the whole of the Margaret River Road Board area. It seems strange that there is a big variation from the extreme south to the extreme north of the road board; and one farmer wants his burned and another does not, and they come to some sort of agreement, and it is always too early in my opinion -- much too early. In the old days we used to have fires burning all winter. We didn't worry about summertime; we'd burn in the winter, in timber.

They don't do that now at all?---No; I think they like to get inside in the winter.

You say: "There doesn't seem to be any end to this sort of thing for a long time unless the Government does something about it." What do you mean by that?---Actually, I was referring to the work we will have to do now. I have three miles of fence I will have to put up. I am well over 60; I run the farm on my own, and I have a successful farm; but with all this extra work that has come on to me now, you are working 12, 14 hours a day to do it.

What do you think the Government might do about that?---I don't know. It all depends who is responsible for this fire. The people who are responsible for that fire should, in a way, help put the position right. We didn't light it and we wouldn't have lit a fire. We hadn't got a fire in the Karridale district before any of these came in. There had been one or two small ones but we had been on the job and put them out.

Was there any backburning, that you know of, done on the eastern side of the main road to stop the fire going down south?---There could have been a bit of burning; I think there was some done by the Forestry.

You mean before the fire?---Before the fire.

I mean while the fire was on: Was there any done on the eastern side similar to what you say was done on the western side?---I don't know; I was only interested in my own little area. This year we did do some spring burning; there was more done this year than ever before.

What breaks did you have around your actual property?---No round the actual property because -- clearing timber?

Yes?---We have timber on it, on the boundaries. I did plough 10 acres of ground on the danger side, where the fires do come from.

On the eastern side?---On the northern side of my shed.

THE COMMISSIONER: Would you mind showing Mr. McArthur on the plan.

Mr. McARTHUR: Mr. Ironmonger indicates that his house block is approximately in the middle portion of Location 1944.

BY THE COMMISSIONER: You had a piece cleared around that and ploughed?---My farm is practically totally cleared on the internal side.

But the northern end of your property was not protected?---No; I wasn't worrying about it; there was no need. I was protecting the shed, the cattle and the house. When a fire comes in like that you can't bother about anything else.

But before the fire came; I thought you might have put a firebreak of some sort around your property?---The fire season was only just opened -- just before the fire came.

I am speaking of before the summer started; before the danger came on?---There is nothing ploughed, and I can't see how a few yards or couple of yards of ploughing would have any effect on the fire.

You do burn through your bush now and again?---Yes, my bush was burned about four years ago. It is karri country and I wouldn't be able to do that; but on the back side of the property I had a strip bulldozed, and there was a good windrow. We set fire to it and it burned the bush out.

That was accidental?---No; we set fire to it. But usually we can't burn the bush there; it won't burn in five or six years, as a rule.

BY THE COMMISSIONER: I am just asking you because you say that if the forest is burnt every two years this sort of thing should never happen. You do appreciate that there are difficulties in burning?---I appreciate that, but the Forestry have the time, the money and the equipment to do these things, whereas a private individual cannot take out his bulldozer and bulldoze a place to get some stuff to make a fire.

The Forests Department might have the idea that they have not as much money, equipment and manpower as perhaps you think?---They have told us they have plenty of things to control fires.

They have a lot of country to control too. But that is something for them to say. You have a map there?---Yes.

Could you put it in as an exhibit?---It is Mr. Bushby's map. You can have it for all I care.

Would Mr. Bushby agree to its going in?---Yes.

EXHIBIT EXHIBIT "L" Map No. 440.

BY MR. McARTHUR: What time did the fire burn through your property on the Friday?---Between 11 and 12 o'clock. I could not be exact.

You were too busy?---Yes.

You gave some idea of a possible location for a backburn on the bottom end of Location 1353, Mr. Buller's property. Would not the same arguments you have used against the other backburning line further north apply equally down there, if not more so?---No, because in the first place it would not be able to get on such a big face. Secondly, the bush edging on to Buller's property had been burnt to a considerable extent north. I think conditions generally would be more favourable to lighting a fire there rather than through the middle of the bush.

When would you have anticipated doing that?---It could have been done one night, the same as the Forestry did this, or late afternoon.

That would have been five or six miles from where the fire was?---It would have been far better than having two big fires meet up and making one big fire. It was only bush country that it would go through. You could have made the countryside more safe. It would have saved all those farms, I think.

You keep mentioning two big fires. What do you mean? There is the main fire coming from the Forest Grove area. What is the other one?---The other is the one the Forestry lit. Little fires become big fires, and as time goes on the fires increase in intensity and the closer together they get the bigger they get, and gradually merge into one that is the unstoppable one.

You knew the backburn had only gone as far west as the railway line, and the other fire from Forest Grove had already burned around there to the west of it?---It is a long way from the main road to the railway line.

Approximately 1½ miles?---Yes. When the wind got round north, it created a face 1½ miles wide.

Was it not possible the other fire had already gone round to the west of that backburn line?---Yes. It got over the railway line. We had that to contend with, plus 1¼ miles of the fire the Forestry lit, which more than doubled the fire.

But Mr. Bushby said that did not break away until about 11.30 in the morning when your place had already been burnt?---He was referring to the fire that went away into Foster's place. It came back over the main road when the wind changed in the afternoon. It got there at 3 o'clock in the afternoon. The wind had been blowing in a south-westerly direction and then it went north, and of course the fire started going in a different direction. And it went back over the main road again, which it had been doing, going backwards and forwards all the way from Forest Grove with the changes of the wind. That is how it came down there.

BY THE COMMISSIONER: When you say that fire went backwards and forwards, is that from evidence you have seen on the ground, or from your own personal observation?---Yes, you can still see it.

It is from evidence you saw on the ground?---Yes.

Not from your own personal observation?---No.

BY MR. HALE: Do you know how many brigades there are in the Augusta-Margaret River road district?---I do not know for certain, but there is at least one in every small district. There are probably 20.

Do you know if all these brigades were used or engaged at the fire at some time or other?---People came from as far as Margaret River, that I know of, during the fire. And of course the Government sent a lot of fire fighters down from Collie -- two or three truckloads from there. At the finish of the fire there were quite a lot of people on the job. That is why the last few farms were not burnt out; because all the manpower was concentrated on them and they were able to save them.

Do you know if they operated as brigades, or as individuals?---More or less as individuals. That is really one of the big faults. There should be someone in central control who knows his business. He should co-ordinate everything and organise these fellows. In addition he should have maps and walkie-talkie wireless sets, and then I think we might get somewhere providing you got the actual firefighting equipment. I do not see why the Forests Department should not be supplied with the equipment for these emergencies. But there should be one competent head to control everything, and his word should be definite law. We should not have half a dozen men coming in with someone racing up the road and bringing them back and sending them somewhere else, which, as far as I can make out, was happening at Karridale.

You do not know that of your own knowledge?---No. I could not leave my place. But several fellows

have told me that orders were coming from here, from there and everywhere; and I believe that is true. They would not say it unless they were told.

But you do know how stories get distorted as they are told by one person to another?---Yes; but I think you will find, by this stuff that is being collected by the Farmers' Union chappie down there now, that what I have said is so. One man should be in sole charge, and his word should be law.

BY MR. OATES: Mr. Ironmonger, you have made repeated references to other people at Karridale who might be able to give the Commission some useful evidence. Both you and Mr. Bushby have been able to come to Perth to give evidence and it might be as well to indicate why this has been possible, because I have gained the impression that some of these people in Karridale might find it difficult to come to Perth to give their evidence. You might be able to tell the Commissioner if that is so and why they are unable to come to Perth.

THE COMMISSIONER: Unless you want that specifically answered by Mr. Ironmonger, I might explain to you that most of the people down there are dairy farmers who have to do their own milking because they have only small properties and do not employ labour. Both Mr. Ironmonger and Mr. Bushby are able to come here only because they are semi-retired. It is very good of you, Mr. Ironmonger, and you, Mr. Bushby, to come here and give evidence. I hope to have the opportunity of hearing the evidence from those people who were in actual contact with various phases of the fire which you have had to describe in a somewhat loose form. When the Commission does go down there I would like you to tell them that what we want to hear are facts, although I appreciate that you have given us the general story here. We want facts and want to know what actually happened in the various places so that it will help us to draw up measures to prevent future bush fire conditions happening there.

(The Witness retired)

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| EXHIBIT | EXHIBIT "K" | Statements by H.L. Crain and C. Vlamn. |

THE COMMISSION ADJOURNED.

. C.H. IRONMONGER,
15/5/61.

BUSH FIRES
ROYAL COMMISSION

TUESDAY, the 16TH MAY, 1961

LEEDHAM WALKER, Detective
Constable of Police, Perth
C. I. B., sworn and examined:

BY THE COMMISSIONER: What is your name and address?---My Name is Leedham Walker and I am a Detective stationed at the C. I. B., Perth.

You have prepared a statement which you propose to give in evidence before the Commission?---I have.

Would you read it, please?---Yes, Sir. This statement is relative to --

Bushfires in the Forest Grove, Warner Glen, Karridale, Alexandra Bridge, Nillup, Courtney and Treeton areas which got out of control between the 1.3.61 and the 4.3.61 and did extensive damage to farms and other property.

No loss of life. C. I. B. File no. 61/5383.

I am Detective Constable, No.2306.

To Inspector Hagan:

I respectfully report having made inquiries, in company with Constable Sparks, with regard to the bush fires which got out of control between the 1.3.61 and the 4.3.61 in the Forest Grove, Warner Glen, Karridale, Alexandra Bridge, Nillup, Courtney and Treeton areas.

From inquiries made there were seven different fires which got out of control in this area. These I have indicated on the prepared plan attached, showing the area which was burnt, and where each fire originated.

I will describe these fires as referred to on the plan as No.1 -- Holland's fire; No.2 -- McLoughlin's fire; No.3 -- Marsh's fire; No.4 -- Cusack's fire; No.5 -- Payne's fire; No.6 -- Bell's fire, and No.7 -- McClure's fire at Treeton.

The Augusta-Margaret River area where these fires got out of control comes within the area of zone 2, and according to the Government Gazette No.72 dated the 26.8.60, page 2570, the prohibited time for burning off in this area was gazetted as between the 22.12.60 and the 26.2.61. The local authority, according to the Bush Fires Act, has the option if the fire hazard is dangerous, to postpone the opening of this season by 14 days, hence they could have postponed the opening of the season until the 13.3.61.

Briefly, the method used in this zoned area is that a district chief fire control officer is elected, and in this case Mr. C. West, the Road Board Secretary, was appointed to this position.

He, in turn, appoints fire control officers in the district, each with a specified area who issued "Permits to Burn" in their specified area. This permit book is issued only by Mr. West.

This fire control officer in turn appoints the fire captain from his group of farmers and all undertake to assist when called upon by their fire control officer in fighting any bush fire out of control, in their area.

The issue of permits to burn is left to the discretion of the fire control officer whether he issues the required permit or not to the farmers in his area, and each fire control officer should he decide that prevailing weather conditions are unfavourable, or the report over the radio is dangerous fire hazard, can refuse to issue a permit.

Where the farmer is issued with a permit it is his duty to listen to the weather forecast on the radio, and should it be a dangerous fire hazard on the day the permit is granted by the fire control officer, it is up to the farmer to use his commonsense and not to burn.

This permit to burn is dated, the name of the person to whom it is issued is written on it, and the date on which he proposes to burn is also written; and on the bottom of the permit is printed "Notify neighbours and observe Bush Fire Regulations."

The farmer who proposes to burn off, after obtaining his permit to burn, is supposed to notify the Chief Fire Officer, and his neighbours in writing four days before his intention to burn, but from inquiries made in many cases this instruction is not adhered to.

When the fire season opened Mr. C. West, the Chief Fire Control Officer, was on holidays and nobody was appointed in his place, and it was left to the staff at the Augusta-Margaret River Road Board Office to control matters.

Holland's Fire:

Mr. Herbert Lawrence Hollands is a farmer who owns Locations 2773, 2774, 2775, 2776 and 2760.

He is the Fire Control Officer for the No.74 Group District, and as he was holding this position he did not think it was necessary to write himself out a "Permit to Burn".

At about 9.30 a.m. on the 27th February, 1961, which was the opening day of the burning season, he decided to burn off 70 acres on the south end of Location 2760 as indicated on the plan.

16/5/61.

THE WITNESS: Do you want me to refer to this position on the plan?

THE COMMISSIONER: No; that will be all right. We will bring it out in questioning. Continue with your report.

(Report Continued)

He had previously notified Mr. Howard Noakes and Mr. Eric Noakes who are neighbours, of his intention to make this burn, and also the Road Board office; but he did not notify the Forestry Department which controls timbered country on the west and south of this location, nor did he notify Millars Timber & Trading Co. who have timbered country on the east of the location.

When he started this burn he had his son Clement Arthur Noakes (aged 26 years) and a farm labourer from Eric Noakes' property, named Ray Castles (aged 22 years), in attendance.

He stated the wind was blowing from the south-east at about 10 miles per hour and the temperature was moderate, and being a fire officer he was of the opinion that it was perfectly safe to burn.

About six weeks prior to this date he assisted his son in putting ploughed firebreaks around this 70 acres which were about 20 feet wide, and which were cultivated over the top.

This 70 acres he wanted to burn consisted of pasture which had been bulldozed leaving odd heaps of logs, odd large jarrah trees still growing, and suckers that had grown up about 4 feet amongst the pasture.

He started to burn this area from the eastern end, and during that day the fire only burnt down about one-third of the way and apparently went out except for the few heaps of logs in the burnt area that had caught alight, and were burning.

When he could see everything was under control he sent Ray Castles home.

During that day and Tuesday the 28.2.61 in company with his son he picked up roots and sticks from the burnt area which they stacked on to the burning heaped logs and when he went home to his home block Location 2774 on the Tuesday night everything appeared safe.

He did not go to this burnt off area on the morning of the 1.3.61 as he had to go to Margaret River, but about 3.30 p.m. in the afternoon he went down to see how these heaps of logs were burning, and found that a fire apparently started from one of the heaps of logs, had burnt a strip about 3 chain wide of this 70 acres in a westerly direction on the southern end of this strip, and had burnt into the fire break on the south-western end of this 70 acres.

He stated he noticed a tree that was well alight up at the top, about 18-20 yards from the fire break in this south-eastern corner, and fanned by a south-easterly breeze, now at about 20 to 25 m.p.h., sparks from it were being blown over into timbered Forestry land on the west and south side of this 70 acres,

Hollands senior was by himself so he decided to burn fire breaks back from the ploughed break along the western edge of this 70 acres to burn back into the one-third already burnt, and he had only gone about 3 chains when he noticed that the bush just over his ploughed firebreak in the timbered Forestry land on the west side had caught alight.

He rushed back and managed to get this fire out in this Forestry bush, but then he noticed a fire on the south side of the ploughed break in Forestry timbered land start up, so he rushed over to this fire and managed to beat it out, but then he looked back and found where he thought he had put the first fire out in Forestry land was well alight, and the heat made it impossible for him to control the fire by himself.

The tree Hollands Snr. indicated to me which was well alight at the top, and which he feels was responsible for setting fires going in Forestry timbered land, is about 30 yards from Forestry land on the west end and about 48 yards from the south end.

Photographs have been taken of this tree from different angles which, on the backs, indicate the type of Forestry timbered country which caught alight, and the type of country Hollands was burning off in the 70 acres.

Photographs attached.

Hollands Snr. realised that with the direction of the wind, this fire would spread towards Howard Noakes properties, Locations 1637 and 1638, so he went straight across and notified Howard Noakes, who in turn recommended that the Forestry Department should be notified.

Holland Snr. then went home and telephoned the Forestry Department and the call was taken by the office girl and later handed on to the Forestry men later that evening.

Inquiries at the Forestry Department, Margaret River, revealed that they did not attend this fire that evening as they thought it would burn out when it burnt into a Forestry break just

west Location 2760 as indicated on the plan, but it jumped this break and continued burning in a westerly direction towards Howard Noakes properties.

Hollands Snr. and Jnr. patrolled this fire from the time it got out of control until about 2 a.m. on the 2.3.61 when they could see that it had burnt in a westerly direction about two miles and the fact of the fire being about two miles wide, so they decided to go and inform Howard Noakes of the position of this fire, as it was well out of control.

Other farmers in close proximity were notified by telephone, but at this hour they could not raise the Forestry Department, so they asked the postmaster at Forrest Grove to notify the department as soon as possible of the position of the fire.

Clement Arthur Hollands, with his son, then went home and got the tractor and plough, and ploughed fire breaks around the east and south sides of Location 1637 and 1638 owned by Howard Noakes, and all around Location 2713 owned by Frank Mullins.

Hollands Jnr. assisted fighting this fire during that day and at about 4 p.m. went home to find that the original fire on the 70 acres was out of control on Location 2760 on the north side, but by means of ploughed fire breaks he brought it under control.

Statements from Hollands Snr. and Jnr. and Raymond Castle re burning off of this 70 acres, and the origin of the fire (No. 1) as shown on the plan, attached.

Frank Henry Herbert Collins, Forester at Keenan's Pine Plantation, was notified at about 3.40 a.m. on the 2.3.61 by a farmer named Stan Walton of the seriousness of the fire, and Collins went straight to the scene and did a reconnaissance of the fire, accompanied by Howard Noakes, returning to the depot at Keenan's Pine Plantation to pick up gangs and equipment to fight the fire.

Collins thought the spring burning would stop the fire on the west side so he concentrated on stopping it on Forestry tracks on the south side.

The fire area marked in red on the plan indicates where it had burnt out to at 9 a.m. on the 2.3.61.

The wind was blowing from the north-east and had freshened and was driving this fire in a south-westerly direction, and it burnt through the spring burn indicated and jumped over the Forestry tracks shown, so the Forestry men pulled back to Bull Ant Drive to see if they could stop the fire there on the south side, and it was anticipated that Bussell Highway would stop it on the west front.

During that day as shown the temperature rose to 98 degrees F. at 2 p.m. and rose still further to 99 degrees F. at 4 p.m. and by this time the wind had changed to the north-west.

The temperature readings for the plantation period of this fire were obtained from the Keenan Pine Plantation where there wasn't any fire around, and would not be a true indication of the temperature at the scene of the fire, nor would it be a true

indication of the speed of the wind as a fire of this nature causes its own draught, according to what I have been informed by the fire fighters.

When the fire reached Bull Ant Drive, according to Collins, sparks were being lifted at least 300 yards ahead of the main fire, starting up smaller fires which the main fire caught up to.

The fire jumped Bull Ant Drive and continued on burning in a south-westerly and south-easterly direction and it also jumped Bussell Highway in the vicinity of Location 1564. When it jumped the highway, besides the highway it also jumped a strip about 2 chains wide running alongside, which had been cleared by the P.M.G. Department for the telephone line.

The fire at this stage apparently became so fierce that according to Howard Noakes it burnt about a mile in 10 minutes, and fire fighters were content with saving houses in its path rather than stopping it, as the fire was completely out of control.

The second red line as marked on the plan shows where it had burnt to by 6.30 p.m. on the 2.3.61, so it was decided to drop back to the southern end of the locations 2709 and 2710, also the west side of Location 2709, and burn back into the face of the fire in an attempt to save the Boronup pine and karri forests, and this was done on the night of the 2.3.61. This area is shown on the plan with arrows indicating this burn back.

During the Thursday night and early morning of Friday the 3.3.61 the fire was very fierce, and burnt around the northern and southern ends of this back burn, and burnt through farming areas, jumped over Caves Road, and was out of control in the Boronup forests. The fire was out of control on the southern end of the back burn and was burning fiercely in a southerly direction.

Attempts were then made to bulldoze around Antonovich's and Strong's timber mill in the Boronup forests in an attempt to save them. Antonovich's mill was saved, but Strong's mill was demolished by fire.

At this stage the fire became so dangerous, fighting it from the front, that it was decided to withdraw all men from the Boronup forest area back to Bussell Highway.

Statements from Noakes, Collins and Divisional Forest Officer Eastman, describing the fire up to this stage attached.

At this stage, fires were out of control in many areas, but it was decided to withdraw most of the forestry men to the Treeton fire on McClure's property, which was also out of control as it was thought if this fire completely got out of control it would do a lot more damage, and threaten the lives of many more people than those fires out of control south of Margaret River.

A description of the Treeton fire will be given later in this report.

Constable Sparks, who was relieving officer in charge at Margaret River, heard of the seriousness of this and other fires in the area, at about 9.30 a.m. on the 3.3.61 and with five men he went to the area marked "the Cross Roads" which he made a control point.

Efforts were then made to save stock and houses in the face of the fire, and he had in fact, to eject an elderly woman who refused to leave her house.

Constable Sparks then took charge of the control point at the Cross Roads and sent men to different danger points. Constable Sparks stated that when the forestry men left, it appeared as though there was nobody in charge and that was the reason he acted as he did.

During Friday 3.3.61 the fire had spread southerly driven by a north-westerly wind up to 50 mph, and was threatening Karridale townsite, and all residents, with as much of their personal belongings as possible, were evacuated to the Cross Roads.

The fire spread through this township during the afternoon and the hall, the Church of England Church, the old hospital (used then as a residence) another residence in a line of seven houses, together with Millars store and residence, were totally demolished.

Arrangements were made by the police for school children to stop at the schools in the area during the afternoon, and be billeted at the school during the night.

Back burns were made in the vicinity of Hamelin Bay back towards the fire, but these had little effect.

During Friday night the 3.3.61, it was just a matter of trying to save lives, houses and stock in this area.

During the early hours of Saturday morning, 4.3.61, a roadblock was set up in Margaret River by Constable Stephens (also relieving at Margaret River) with the object of preventing vehicles other than those on essential work, connected with the fire, from going south.

Early on Saturday morning the 4.3.61, it was brought to Constable Sparks' notice that there was dissension amongst the fire-fighters, and those in charge at the control point at Noakes' property at Forrest Grove. Constable Sparks went to this point and made it known that Mr. Charles West (secretary of the Roads Board) and Chief Fire Control Officer, who had returned from leave, was in charge and the fire-fighting then began to run in a smoother manner in this area.

During late Friday afternoon the 3.3.61, as a result of arrangements made by Inspector Meyer at Bunbury, 50 fire-fighters and forestry men from Collie, arrived in the Cross Roads area and relieved men who had been fighting fires for the previous two days and nights.

During Saturday 4.3.61, while the Collie men were fighting the fires on the south front, other fire-fighters kept Bussell Highway and other roads clear of fallen trees, extinguished fires in culverts, and rebuilt culverts.

It would appear that as the result of a drop in temperature on the 4.3.61, and again on the 5.3.61, together with a wind change to the south-west which drove the face of the fire back into the area already burnt and the assistance of relief fire-fighters, that this fire on the south end was brought under control except for isolated spots.

Statement from Constable Sparks attached.

The area burnt with this fire is shown on the plan in yellow paint; wind directions are also shown together with speed of winds, and temperatures during these days.

On the 5.3.61 and the 6.3.61, with the wind change to the south-west, this fire began to burn northwards into Chapman Brook area, so bulldozed tracks and fire breaks were put across the face of these fires in the area shown, and these fires burnt back into these burnt back burns.

Patrols were made of these back burns until the 8.3.61. Statement attached from Charles Samuel West, Chief Fire Control Officer, who was in charge of these back burns.

From my own observations of this fire I feel that if the Forestry Department had attended when first contacted by Hollands Snr. about this fire, instead of 12 hours later, there may have been a possibility of controlling this fire in forestry bush, east of Bussell Highway, and the damage would not have been so extensive.

McLOUGHLIN'S FIRE:

Charles Peter McLoughlin is a farmer who is the owner of Locations 2407 and 2408 on the plan attached.

After obtaining a permit to burn from his Fire Control Officer (Colin Campbell), this farmer decided to burn 11 acres of pasture country which had a small amount of low scrub on it, Location 2408.

He started to burn this 11 acres at about 11 a.m. on Monday, the 27.2.61, but he stated as the weather was mild with a mild south-west wind blowing, he did not get his neighbours or anybody else to assist him with the burn nor did he plough fire breaks around it. He stated he notified neighbours of his intention to burn.

He stated that by 2 p.m. this 11 acres burned satisfactorily, but he noticed that a strip of bush country between this 11 acres and the Blackwood River had caught alight.

McLoughlin then burned the strip of bush around the bridge crossing the Blackwood River to make that safe, and he stated that he thought with the mild weather and a forecast over the radio of rain coming, that this fire would burn itself out.

Pks/Bly L. WALKER,

On Tuesday, the 28.2.61, he noticed that this fire was still burning slowly in bush country, and was working its way around the river, and was threatening bush country in Shirley Mile's location 2410 on the plan, produced, so he cut a ploughed break between 2408 and 2410, but he did not plough same right through to the river as Shirley Miles stated he wasn't worried about this strip of bush burning on the west side of location 2410.

During Wednesday, 1.3.61, and Thursday, the 2.3.61, this fire burnt steadily in a southerly direction in timbered country along the Blackwood River on the west side of location 2410, and farmers in this area went to assist with Bell's and Cusack's fires as they were out of control.

At lunch-time on Friday, 3.3.61, the fire that had originated in McLoughlin's had spread in a southerly direction, fanned by a strong north-west wind, and had burnt down through location 2413 into location 3980 (Sunday's) and was spreading further south.

The temperature had risen from mild on the Monday to hot and humid on the Friday, which possibly assisted this fire to get out of control.

Farmers in this area were called back from other fires, and under the control of Fire Officer Campbell, they began to fight same.

Late on this afternoon, the fire jumped the Warner Glen Road, and burnt into pasture on location 2412, and was threatening Campbell's house and sheds, so all men in this area were called to stop the fire on this location.

They fought the fire during the night with ploughed breaks and back burning and by Saturday morning 4.3.61 had it under control in this area.

On Saturday morning this fire on the south face had burnt itself practically out in previously burnt bush country, locations 3083 and 2439, but it was burning steadily in a south-easterly direction in timber country in locations 2434 and 2435.

During Saturday, patrols were made of the Warner Glen Road, to shift burning fallen trees from the road and to stop sparks from them being blown in an easterly direction, and starting fires on the east side of Warner Glen Road.

On Sunday, 5.3.61 and Monday 6.3.61, a back burn was put in through bush country back towards location 2434 as indicated on the plan to bring this south-east corner of this fire under control, and by Tuesday 7.3.61, this fire was completely under control.

The area painted orange on the prepared plan attached together with the back burn, shows the area burnt in this fire.

L. WALKER,
16/5/61.



Pks/Bly

From my own observations of this fire, if McLoughlin had been more careful when this fire was first set alight with regard to fire breaks, the area shown burnt would never have been affected.

Statements from McLoughlin and Campbell attached, describing this fire, together with a statement from Thomas William Busby, describing the back burn.

The fire control officer in charge of this area is Colin Edward Campbell, who is completely deaf and I feel, with such a disability, he should not hold such a responsible position with regard to bushfire fighting.

Should he be called as a witness in any inquiry it will take some considerable time to hear his evidence.

MARSH'S FIRE:

Frederick Charles Marsh is a farmer who owns locations 2447, 2448, 4075 and 4170 on the plan attached.

On Monday, the 27th February, 1961, he obtained a permit to burn pasture land on location 2448, from Colin Edward Campbell, who is the fire control officer for this area.

Campbell apparently thought that too many permits had been issued for the 27th February, 1961, and made this permit out for the 8th March, 1961, although Marsh informed him that the only safe time to burn was with the north-east wind.

Marsh did not conform with the permit issued to burn on the 8th March, 1961, and at about 4 p.m. on Wednesday, the 1st March, 1961, he set alight to the pasture land he required to burn.

When he set this fire he had a neighbour in Harry Millington and his brother Harry in attendance, and he notified his father who owns Locations 2445, 2446 and 3836 of his intention to put this burn through.

During November 1960 Marsh had put a spring burn through timber in Location 2448 just south of where he desired to burn this pasture, and he thought everything on the south side would be safe.

He started a fire in the north end of this pasture to allow it to burn into his previous timber spring burn.

He stated the weather was humid but the wind was moderate and it appeared as though he had a safe burn until about midnight that night when this fire started to burn through the timbered spring burn on the north-east end.

The fire burnt through the spring burn at this end into timbered land in Location 2452 owned by Vern Payne.

Ploughed fire breaks were then put in along the west end of Location 2449, through the north end of the same location and down through the middle of locations 2452 and 2453 in Payne's property where the timber ran into his pasture land. The idea was to save the pastures on this east side.

The fire took all day Thursday 2/3/61 to burn through this timber country on Location 2452 and 2453 but then it continued burning south into timber country in Location 2454 and 2455 owned by Russell Smith, and again ploughed breaks were put in between timbered country and pasture.

While the fire fighters were controlling the fire on the east side it burnt nearly all Location 3836 which is bush country and owned by Marsh's father, and burnt down to Brockman Highway where it jumped the highway and burnt into Burge's property on the south side of Brockman Highway where it burnt into a fire on the south west side from Bell's property and burnt into a spring burn owned by Norman Scaddan in Locations 3739, 2480 and 2759 and was brought under control.

This fire only burnt through bush country with the exception of about 20 acres of pasture burnt on Burge's property south of Brockman Highway.

From my own observations of this fire, apart from Marsh starting the fire contrary to conditions of permit, according to weather conditions obtained from the Keenan Pine Plantation at about 4 p.m. on 1/3/61, it was 98 degrees F. and the wind was blowing at 20 m.p.h. which would appear not to be a safe time to start a fire. The area burnt in this fire is shown in sea green colour on the plan.

Statement from Marsh obtained.

CUSACK'S FIRE:

John Patrick Cusack is a farmer who owns Locations 2465, 2466, 2467, 2468 and 2470 as shown on plan attached.

On the 25/2/61 he obtained a permit to burn on Locations 2466 and 2468 from his fire control officer (Thomas William Busby) for that area.

The permit was dated to make this burn on the 27/2/61 and Cusack wanted to put a burn through some pasture land which had odd bits of bulldozing through it.

On the evening of the 27/2/61 assisted by a neighbour in Victor Castles fire breaks were put in about six chains wide on the south side of the area he required to burn. He had previously put in ploughed fire breaks around the whole area he wanted to burn, as stated.

At about 1 p.m. on Tuesday the 28/2/61, assisted by Gordon Payne another neighbour who owns Locations 2461 and 2462 on the north side, this fire was set alight when the weather was humid, and the wind was blowing moderately from the east.

This burn went through satisfactorily, and that evening they patrolled it, and everything appeared safe.

During Wednesday the 1/3/61 further patrolling was done, and that evening everything appeared under control except for a few dead threes burning in this area, and they were burning slowly and appeared safe.

On Wednesday evening Cusack went to Augusta, and when he was returning home at about 8.30 p.m. he noticed a fire out of control on the south side of Brockman Highway near the turn off going up to his property. This fire would be the fire which got out of control from Payne's property.

Cusack assisted with fighting this fire during Wednesday night, Thursday and Friday morning.

At about 11.30 a.m. on Friday 3/3/61 he received a message from his wife that a limb of a burning tree had fallen over the ploughed fire break on his own Location 2468 and it started a fire in bush country which was out of control.

The temperature on this day according to Cusack was very high, the wind was blowing from the north east but was changing from time to time, and was strong and gusty.

Ploughed fire breaks were put in along the north side of Location 2461 and 2462 owned by Gordon Payne which controlled this fire on the north side, and breaks were put in around the west side of Locations 2463 and 2464 which controlled it on the west side.

This fire fanned by the north west to north east wind, spread quickly through timber in a south easterly direction into Locations 2470 and 2471 owned by Victor Castles, and then spread further into Location 2469 and 4110 owned by Manuel Mas, and by about 2 p.m. had burnt through to Brockman Highway.

Location 4110 is nearly all cleared except for a few lines of bulldozed timber in wind rows, but the fire caught to these and completely burnt them and sparks from them were blown over the Brockman Highway and the fire started afresh in timber country on the south side of it.

Mas was able to save his cattle and house by putting ploughed breaks around them in the south west corner of Location 4110.

The fire only burnt in about a mile in timber country south of Brockman Highway, and burnt out on the Saturday.

On the east side this fire jumped over the Great North Road, and was burning in Forestry timber country, but this was brought under control on Sunday 5/3/61 by Forestry men from Nannup who bulldozed around the face of it.

On Saturday the 4/3/61, a protective burn was put around Mas's timber mill as indicated on the attached plan.

The area burnt out in this fire is indicated on the attached plan in light blue paint.

Statements attached from Cusack, Mas and Busby, together with a statement from Alan Ronald Hill, the Forestry Officer at Nannup.

I obtained the wind directions as shown by records taken at the Carlotta Forestry Tower from the 27.2.61 until 6.3.61.

These are shown in Hill's statement attached and can be used for comparison with wind directions obtained from Keenan's Pine Plantation.

From inquiries which I made into the cause of this fire, I found that Cusack was away from his own home on the 2.3.61 and 3.3.61 fighting other fires, and I came to the conclusion that had he been home and noticed this tree had started to burn, there is a strong possibility that this fire may never have occurred.

Payne's Fire:

Walter Edwin Payne is a farmer who owns Locations 2751, 2752, 2753, 2754 and 2755 as shown on the plan attached.

At about 5 p.m. on Monday 27.2.61 after obtaining a permit to burn from Fire Officer Busby, Payne decided to burn off the eastern side of Location 2751 which was pasture land dotted with a few trees.

This fire would not burn because of the damp atmosphere so on Tuesday evening the 28.2.61 he tried to again burn this area as the atmosphere was not so damp and he thought it safe to burn.

He did not have anybody to assist him with this fire other than his wife and family of six children, but he did notify neighbours verbally of his intention to burn off.

During Tuesday night, this area burnt satisfactorily but during Wednesday the 1.3.61, this fire started off in swampy bush country in Location 2752 and by that night was out of control and was burning in a south westerly direction fanned by the north-east wind.

Payne notified Busby of the circumstances of this fire, and during the Wednesday night firebreaks were put in along Brockman Highway on the north side end of Locations 2750, 2754 and 2755, and also along the west edge of 2755 to stop this fire from spreading north and jumping over Brockman Highway.

They managed to stop the fire from jumping the Highway, but the face of the fire by this time was about a mile and a half wide and it was burning in timbered Crown land in a south-westerly direction. It burnt into Location 2477 where it was again controlled on the north side at a creek running through the centre of this location.

The fire then burnt into Location 3972 but was controlled on the west face in Location 2490 by ploughed firebreaks put in by a farmer named Norman Scaddon.

The fire continued burning south-westerly, and efforts were made in Location 2488, 2487 and 2486 owned by a farmer named Collier, to stop this fire by ploughing and burning firebreaks, but the fire jumped the breaks on Friday morning the 3.3.61, and then efforts were made to stop the fire at Sunshine Ave., but again it jumped the breaks and burnt out all the farming areas in the Courtney District as shown on the plan; it spread down through Crown land which is timbered, and burnt itself out at the Scot River in the south.

On the north-west corner this fire met up with a fire which originated on Bell's property, but from inquiries made I found it difficult to ascertain just where they met.

On the west side this fire apparently burnt into the Blackwood River and burnt itself out, but again, I could not ascertain whether it jumped this river and was responsible for timbered country burnt in the Glenarty Creek area or whether Bell's fire was responsible for all this area being burnt out.

The area indicated on the attached plan painted red is the area I feel was burnt by this fire originating at Payne's property.

Statements attached from Payne, Busby and Norman Eric Scaddon who is the Fire Captain for the Courtney area.

From my inquiries I am led to the conclusion that had Payne had more assistance when he first set this fire going, perhaps the fire may not have got out of control.

Bell's Fire:

James Robert Bell is a farmer who owns Location 4055 on both sides of Warner Glen Road as indicated on the plan attached.

At about 2 p.m. on Monday the 27.2.61 after getting a permit to burn from Fire Officer Campbell, Bell started to burn off 90 acres of bush country on the south end of this location.

The wind was blowing from the south-east and was moderate and the sky was overcast.

When he set this fire going on the north end of this 90 acres he required to burn, he had Fred and Harold Marsh in attendance to assist him with it.

He worked around this 90 acres in a clockwise direction setting the bush alight as he went.

North of this 90 acres of bush country is pasture land, and he made sure this was safe before going around the bush country.

At about 5 p.m. three parts of this 90 acres had burnt, and as it appeared safe, the Marsh brothers went home. The 90 acres burnt without any incident.

On Tuesday 28.2.61 he kept this fire area under observation, and everything appeared safe, with the exception of a few odd trees which were burning.

About midday on Wednesday the 1.3.61 Bell found that the strip of timber country between the south end of his burn, and Brockman Highway, had caught alight. The temperature on this day was hot and the wind was blowing from the north-east fairly strongly.

When he went to attend to put the fire out on this strip of bush country, he noticed a small fire spring up in swamp country just east of the south end of his location, and the undergrowth was too thick for him to control. The fire started to burn towards Warner Glen Road.

He stated he went to the junction of Warner Glen Road and Brockman Highway, and started to burn back into this fire, but the back burn got out of control, jumped over Warner Glen Road and fanned by the wind burnt towards Alexander Bridge in timbered country where it burnt into the Blackwood River and was under control on the west front, north of Brockman Highway.

The fire jumped over Brockman Highway near the Alexander Bridge timber mill and also near Location 2481, and started to burn in timbered country in a south west direction; on Thursday the 2.3.61 it burnt into the Blackwood River, jumped over it near Alexander Bridge, and burnt out a large area of timbered country west of the Blackwood River as indicated on the attached plan.

The fire which jumped Brockman Highway, near the Alexander Bridge mill, burnt all Location 3871 and was threatening Locations 2482 and 2483 owned by Mary Cameron, but by means of fire and ploughed fire breaks nearly all these two Locations were saved from this fire.

The fire burnt a short distance further south and burnt into the Courtney fire which originated from Payne's property.

Statement from Bell and Campbell describing this fire, is attached.

The area painted blue on the attached plan indicates the area burnt by this fire.

McClure's Fire - Treeton:

Bruce Robert McClure is a mill labourer, but he also owns Location 3057 (shown on the plan attached) which he is clearing on the condition of purchase for farming.

At about 5 p.m. on Monday the 27.2.61 McClure approached his Fire Control Officer in Laurie Kearney in Cowaramup for a permit to burn off 11 acres on this Location.

The area he wanted to burn was pasture land which was partly cleared.

Kearney informed him that it would be all right to put this burn through, but he did not have his permit book on his person to give him the permit in writing, but he would give him same later.

McClure returned home, and that evening he put this burn through. At the time the wind was blowing moderately from the south west. This 11 acres is situated in the north west corner of his Location.

The burn went through successfully and the following morning he checked around it and everything looked safe. During Tuesday 28.2.61 and Wednesday 1.3.61, everything appeared safe and the only thing that was burning was an odd log.

On Thursday when he went to work he checked these logs and again everything appeared safe.

McClure stated he did not put any ploughed fire breaks around this 11 acres as everything appeared safe, and the only place where this fire may have got out of control was on the north side in timber country, but he had previously spring burnt it, and thought it would be safe.

Between his location and Location 2229 owned by Ray Harvie there is a surveyed road, and on the west side of it Harvie had ploughed fire breaks about 60 feet wide.

On the Thursday morning he noticed an odd tree in this surveyed road had caught alight, but with Harvie's ploughed firebreaks he thought this would be safe.

During Thursday the temperature rose in the vicinity of a century and the wind freshened and as the result of a message from his wife at about 11 am he returned home. He found that apparently a spark from one of the trees burning in the surveyed road had blown over Harvie's ploughed firebreaks into lines of bulldozed trees which had caught alight.

When McClure could see how the fire had spread, he contacted Robert Blaikie who was a neighbour and also a lieutenant of the Treeton fire brigade.

The fire spread through Harvie's windrows and burnt in a south-west direction, jumped over the North Treeton Road into Crown timbered land and spread into Location 2230 owned by Ernie Taylor, where it burnt out his pasture land.

The wind had strengthened, and was blowing from the north-east.

Back burns were put in along Locations 2222 and 2224 to stop it from spreading west, and also along a creek in Location 2230 which temporarily held it, but a spark was blown over the breaks in Location 2224 and the fire spread into Location 2223 but was again stopped at the Carbunup River that night.

On Friday morning the 3rd March, 1961, the temperature was still high, and the wind strong, which switched to the north-west during the morning. The fire in the creek of Location 2230 got out of control and swept through Location 2231 and into Location 2232.

Ploughed breaks were put in along the east side of Location 2248 and through the centre of Location 2232 which brought the fire under control on the east front.

Firefighters managed to keep the fire in the bounds of the South Treeton Road on the south, and the road to Carbunup on the west.

The fire did not get over the South Treeton Road but by this time Forestry men from the Karridale fire arrived and subdued this fire.

The area shown in grey on the plan attached shows the area burnt out by this fire.

Statements attached from McClure and Robert Kenneth Palmer, who is captain of the Treeton fire brigade.

From my own observation of this fire I feel that the firefighters under Palmer did a magnificent job to keep this fire in the area as they did. From information gained from a good authority, I understand that if this fire had got out of control, as did the Forest Grove-Karridale fire, all plantations would have been burnt, and the fire would have swept through Margaret River, with possible loss of life.

I have interviewed Mr George William Mackey, Deputy Director, Bureau of Meteorology, Observatory, Perth, and obtained from him the weather forecasts given to the A.B.C. for broadcast for the south coast area, and the lower west coastal area of this State from the 27th February, 1961, until the 4th March 1961.

Copy of these forecasts attached, and from these it can be seen that on the 27th February 1961, and the 28th February, 1961, the forecast was rain, hence it can be understood why farmers in this area considered it safe to burn.

A report is also attached from District Divisional Forestry Officer Eastman who went to the scene of these fires, and from his inquiries and observations, he assisted me to outline the fires as shown on the prepared plan.

This officer plotted the outline of the fires from an aeroplane, and with the assistance of farmer, I was able to outline areas which were put in as only approximate by Mr Eastman.

Photographs taken during my inquiries are attached for perusal:

1. Photograph of a dead tree near the fire break in the south-west corner of Location 2760 owned by Herbert Lawrence Hollands from which he saw sparks being blown into Forestry timber country.

2. Photographs of the same dead tree from a different angle. This photograph depicts the type of land which Hollands was burning off.
3. Photograph taken from the south-west corner of Location 2760 owned by Hollands looking east, which shows the area of firebreak around the area he required to burn - forestry bush country in the background.
4. Photograph taken from the same spot, looking north, showing the fire break around this area.
5. Photograph taken along Caves Road just north of where the Forrest Grove fire swept through. This area was not burnt and depicts the undergrowth on the side of the road amongst the timber.
6. Photograph taken along Caves Road where the fire swept through. Note how the trees met at the top and through this, there would be no chance of stopping a bush fire at this road.
7. Photograph taken from Caves Road where the fire swept through. (White ash on the ground which has the appearance of water. This depicts the amount of heat this fire radiated when it swept through).
8. Photograph taken from Caves Road in the Boranup sand patch area where the fire swept through.

9. Photograph taken from a different angle from Caves Road in the Boranup sand patch area.
10. Photograph taken from the railway crossing on Karridale Road, showing timber through which fire swept.
11. Photograph of a line of seven houses in Karridale where one house in the line was burnt. Fire swept through karri timber in the background.

12. Photograph of the old hospital at Karridale - destroyed by fire. Fire swept through karri timber country in background.

13. Photograph of Millars' timber and trading company store and dwelling at Karridale - this was destroyed by fire. Fire swept through timber in background.

14. Photograph of the Karridale Hall which was destroyed by fire. Fire swept through timber shown in the background.

15. Photograph of hay and oats at Hubert McDonald's property at the cross roads - this was made a depot for donations of feed and seed for farmers who had been burnt out.

16. Photograph of tree on Cusack's property from which a burning limb dropped across the plough break.

17. Photograph of the timber growing on the surveyed road between McClure's property and Harvie's property, Treeton, where this fire became uncontrollable.

18. Photograph of the type of country McClure burnt out at Treeton.

Also attached are other photographs taken by members of The West Australian Newspapers staff at the time of the fire.

From my own inquiries and observation of the burnt-out areas I feel that the following factors possibly have a bearing on such a large area of land being burnt out:

1. The burning season for the Augusta-Margaret River area opened too early.

2. The local authority did not extend the opening date of the burning season the 14 days which they have power under the Act to do.

3. The local authority did not consult the advisory committee they had appointed with regard to the opening of the season.

4. The fire control officers appointed should have restricted the number of permits issued on the opening of the burning season.

5. Many minor requirements not complied with regarding notifying neighbours in writing, and the local authority, of an intended burn.

6. Lack of fire breaks throughout the area. (I travelled several miles and did not see a fire break even around boundary fences).

7. Dirty bush country which includes private, Crown, and Forestry country - it would appear that there have been insufficient spring burnings over the years.

8. Insufficient patrolling of fires after a burn has been put through.

9. General apathy by farmers in some areas with regard to bush fire control.

10. Lack of sufficient communications, particularly in the Nillup-Courtney areas.

11. Lack by farmers to adhere to radio forecasts re dangerous fire hazards.

12. More power should be given to Local Fire Control Officers and Fire Captains to make sure farmers spring burn in scrub country which has become hazardous.

13. Farmers should never have set fires going under the prevailing weather conditions after such a long dry summer.

14. Many farmers when hearing on the radio that rain was coming, started their burning off without taking any notice of the cyclone warnings given by the Weather Bureau.

While I was on inquiries with regard to these fires, I met Messrs. Harry Hale, Snr., Bush Fire Control Warden, 49 Bennett Street, East Perth, and Harold Straker, Bush Fire Control Officer for the South West Division, 10 Mossop Street, Bunbury, who were also carrying out inquiries for their department.

I had a conversation with them about the many breaches of the Bush Fires Act and they informed me they would be submitting a report to their department which would be sent on to the Local Authority at Margaret River for any necessary action which they thought should be taken. Hence I took no action under this Act.

During my inquiries I did not meet one farmer who blamed any other farmer for negligence for their personal losses, but they adopted the attitude that after a long dry summer, and the cyclonic weather conditions which developed soon after the opening of the burning season on the 27.2.61, it was not surprising such devastation had been caused to their properties.

After the fires were under control, with the oats and hay which was sent down from many parts of the State for the assistance of farmers whose properties had been devastated, a depot was set up at Mr Hubert McDonald's premises at the Cross Roads, Karridale, to receive the oats and hay which has been evenly distributed between burnt-out farmers, according to their acreage and amount of stock.

A committee was appointed from farmers and together with the Farmers' Union an assessment was made of the damage done by these fires in this area with regard to pasture, hay, buildings and boundary fences lost and the approximate figure came to 7, 7, 50 acres of pasture burnt, 370 tonnes of hay burnt, 5 houses, 7 milking sheds, 13 hay sheds, and 16 other sheds burnt; 133 ½ miles of boundary fences burnt -- approximate value ^90, 214.

BY THE COMMISSIONER: That is for the whole of the losses?---Yes.

It covers pastures and everything else?---Yes.

These particulars were obtained by Constable Sparks from the Committee mentioned. A detailed list of the farmers who had losses is attached for perusal. This does not include the loss of the hall, store and house at Karridale townsite, nor does it include farming implements, farm vehicles and tools lost in these fires.

THE WITNESS: By that time they had not been able to assess the loss with regard to those. They mainly concerned themselves with fences, hay, houses, and stock in the area.

District Forestry Officer, Walter Eastman, in his attached detailed report, makes mention of the Margaret River townsite fire which burnt out an area of about one square chain of karri trees, but as the damage was negligible, I did not inquire into this fire, or the cause of same.

In the Forrest Grove-Karridale fire (Holland's) District Forestry Officer Eastman estimates that 9,800 acres of forestry timber and about 2,000 acres of non-forestry timber was burnt.

The Warner Glen-Great North Fire (Cusack's) District Forestry Officer Eastman estimates 160 acres of forestry timber was burnt in the State Forest No. 63.

These fires mainly burnt privately-owned land, which is covered in the estimate attached, obtained by Constable Sparks.

District Forestry Officer Eastman estimated that the cost to the Forestry Department alone to fight these fires came to ^4,380 (approx.)

During my inquiries many people paid tribute to the efforts of the police in fighting these fires and in particular to Constable Sparks of Margaret River.

Respectfully forwarded for the information of the Coroner and the members of the Royal Commission.

C.I.B. Perth, (Sgd) L. Walker,

15.4.61. Detective 2306.

BY THE COMMISSIONER: You referred to maps and photographs and various reports. I think it would be advisable to put those in as exhibits?---Yes.

EXHIBIT EXHIBIT M: Map 441 and others.

BY THE COMMISSIONER: And then you have about 18 photographs for which I understand you are personally responsible?---Yes, I personally took these, Sir. They are numbered 1 to 18, and are self-explanatory.

EXHIBIT EXHIBIT N: Photographs Numbered 1 to 18 taken by Detective Walker.

THE WITNESS: I also have some photographs taken by "The West Australian" newspapers who were on the spot at the fire. Those may be of some use to you.

EXHIBIT EXHIBIT O: Photographs taken by "The West Australian" newspapers.

THE COMMISSIONER: You also have certain reports, I believe?---I have taken statements from different men throughout the area, and I can hand them in, if you like.

Can you list the men covered, or is there a large number?---I can list them in order, if you like.

How many would there be roughly? About 30?---I have never counted them actually.

I think they had better be listed?---Very well.

EXHIBIT EXHIBIT P Statements from:

| | |
|---|---|
| Herbert Lawrence Hollands | John Patrick Cusack |
| Clement Arthur Hollands | Manuel Mas |
| Raymond Castle | Alan Ronald Hill |
| Frank Henry Herbert Collins | Wallace Edwin Payne |
| Howard Leslie Noakes | Thomas William Busby |
| Ronald John Sparks | Norman Eric Scaddon |
| Charles Samuel WestJames Robert Bell | |
| Charles Peter McLoughlin | Bruce Robert McClure |
| Colin Edward Campbell | Robert Kenneth Palmer |
| Frederick Charles Marsh | |

BY THE COMMISSIONER: On page 11 of your report you refer to a Walter Edwin Payne?---It should be Wallace Edwin Payne; that is my mistake.

THE WITNESS: I did not take a statement from Mr. Mackey. He just gave me details of everything with regard to it. But he can be contacted. This is what he would give with regard to any evidence.

THE COMMISSIONER: He will be giving evidence.

THE WITNESS: There were particulars obtained from, I think, a George William Mackey.

BY THE COMMISSIONER: I think there may have been one missed. On page 13 of your evidence you refer to statements from Bell and Campbell. You have already given us one statement from Campbell. It was in connection with another fire. Have you two?---No; I covered the two fires in the one statement. There is also this assessment obtained from Constable Sparks with regard to the damage. Actually, I was there when it was handed over to Constable Sparks.

He handed it to you?---He handed it to me; the men down there handed it to both of us.

You are handing it in as one of the statements?---Yes, with regard to the damage done; that is, 7,750 acres: The 370 bales of hay lost, five houses, 13 hay sheds and the milking sheds, 16 other sheds, 133½ of fencing, at an approximate value of £90,214. There are small pieces under that which do not include farming implements and that sort of thing. Then there is a report from Mr. Eastman.

Mr. Eastman made a brief report. Can you give us the date of that report?---The 7th April, 1961. Then there is my own report.

Which you have given in evidence?---Yes.

How do you feel about carrying on with questioning. Would you welcome an adjournment - we usually break about 11 o'clock?---I do not mind carrying on.

THE COMMISSIONER: We will carry on; I will take the preliminary information.

BY THE COMMISSIONER: Would you mind telling us what your experience is of country life?---I was born in the country; I was brought up in a farming area practically until I joined the Police Force.

And you have been associated with bush fires before?---Not a great deal of bush fires.

But you understand country life. That is the main thing. This information, which you have put together in a very comprehensive report, was obtained from interviews with all of the people mentioned therein?---That is correct.

You know none of the occurrences which took place at these fires as a matter of your own observation and knowledge?---No, sir. All the information in those reports is from interviews with different farmers and forestry officers and people contacted with regard to the fires in the area, from which I put together my report.

Did you inspect the actual areas involved in the fires?---I did.

You know that of your own personal knowledge?---I do.

Correct me if I am wrong, but I think you said that this map showing the spread of the fires was developed as a result of an aerial reconnaissance?---Yes.

By yourself and Mr. Eastman?---Mr. Eastman did the reconnaissance. He prepared a rough map and

gave me a rough copy of all the areas he thought were burnt out; and then I checked his rough copy and found it very accurate.

You checked it by your own traversing of the country, or by discussions with farmers?---I checked it by my own traversing of the country. If I'd get an area I'd perhaps go down three miles. You could see the general line of the fire. I'd interview perhaps two farmers in the area, and they'd give me an area through their properties where the fire had burnt. By that method I was able to get a fairly accurate idea of the area burnt out by the fire.

How long after the fires were you down there; what dates were you down there? Can you indicate roughly how long after the 1st of March, when the fires were at their height?---I think it would be about 10 days after then.

From your evidence it looks as if all the fires had finished by the 6th of March - even the most protracted of them?---With regard to the top end of the Holland fire, and where they were back burning, and with regard to McLoughlin's fire, where they burnt along the end there, that was done on the 6th and they controlled it up until the 8th.

Yes. The fires did not spread?---No, they did not spread.

You were there a few days after the fire stopped?---About 10 days, I would say. I was sent down by the department to inquire into them, specially.

Ten days after the 6th?---Yes.

BY THE COMMISSIONER: You refer to the fact that these fires came within the area of Zone 2. Would you explain what you understand by the term "zone"?---I wanted to know the burning off season for that area, so I referred to the "Government Gazette" at page 2570, and I could see it was under Zone 2. I did not go into what the zone actually was, but I understand it is that lower south-western area of the State. I did not check it.

You did not check the boundaries?---No.

Do you know when that fire ban came on?---I would not like to say for sure.

Do not worry if you cannot say for sure?---I do not know for sure.

You have perused the Bush Fires Act in connection with your work down there, I suppose?---Yes.

Do you recall that Section 18 sets out the conditions under which you may burn under permit, and it says that you shall not light a fire on a day which has been forecast as a dangerous day?---That is correct.

Did you actually see the permits that these people were issued with?---I did. I saw the permit in the case of each of the people I interviewed.

No one had any objection to producing them?---No, with the exception of Mr. McClure. I do not think he has his yet. I did not see it.

On these permits you refer to the fact that there was a statement that they should notify their neighbours?---That is right.

Did you look at the regulation of the Bush Fires Act to see the form the permits should take?---I looked at it. After speaking with Mr. Hale and Mr. Straker I could see that my department's action was to go through the whole fire, and if there were any breaches I was to take the necessary action according to what I thought best. But after speaking with those two gentlemen and seeing what action they were going to take, I could not see any reason why the local authority could not take the necessary action.

I was not concerned with that. I was wondering whether the type of permit that they were issuing was the type that was supposed to be issued under the Act. The form of permit given under the regulations, rather than the Act, indicates that a summary of the conditions under Section 18 should accompany it?---As far as I could ascertain, the form was up to date with regard to the Act, except for Mr. Hollands' which was outdated.

They had the whole summary of conditions on them?---Yes, on the back of the page.

And Mr. Hollands' did have some of the conditions?---Yes, some were on it, but it was outdated in comparison with the others.

You refer to the fact that the Chief Fire Control Officer in the Augusta-Margaret River district was absent on leave at the time of the fire. Did you ascertain whether it was usual for him to be away on leave at that time of the year?---Actually he was supposed to take his leave earlier in the year, but he was recalled for some reason; and as a number of people were on leave around the district in the holiday season, he decided to take the other few days due to him at that time. Perhaps it was unfortunate that he did so when, in fact, the opening of the season had started.

You do not think it was his practice?---No; I do not think it was usual for him to take his leave at that particular time.

Apparently nobody was delegated to take his place?---No.

From the evidence you have given, it seems that Mr. Hollands had no permit to start with; he did not notify his neighbour, the Forests Department; he did not keep three men on the fire until it had been declared safe. He, being a Fire Control Officer, probably through that as well as having the right to burn, he had the right

16/5/61.

to decide when it was safe?---Mr. Hollands is a man who is in the vicinity of 70 years of age -- his age is in the statement -- and seems a fairly level-headed man. He was very upset that the fire should have got out of control as it did.

You refer to his son as Clement Arthur Noakes -- that is on page 2 in about the fifth paragraph. Is that a typographical error?---That should be Hollands. I think that is correct in my original report which has been put in as evidence.

He told you that a lighted tree, in some little distance from his south-eastern corner, was throwing sparks and that fanned by a south easterly wind they were falling on the west side of the 70 acres -- on the west and the south side of this 70 acres?---Yes.

It would be difficult for them to fall on the south side if it was a south wind?---Perhaps I could indicate the position on the plan.

Yes?---(The witness indicated the position on the plan).

THE COMMISSIONER: Detective Walker can only say that is what he was told by Mr. Hollands; that the sparks were falling on the south side.

BY THE COMMISSIONER: You may not be able to answer a lot of these questions, and I can quite understand it. But you said that Hollands Senior went home and telephoned the Forests Department and the call was taken by the office girl and later handed on to the Forestry men later that evening. Do you know what time

the telephone call was put through?---According to Mr. Hollands it was put through about 4 p.m.; it would be in his statement.

Perhaps, if the statement is passed back to you, you could check some of these things. This matter is rather important because you suggest later on that had that message been acted upon, the results might have been different?---I could not state the exact time, but he went to his own property -- the 70-acres property -- between 3 and 3.30 p.m. and he saw the position, and that it would take him some considerable time, and then he went to Noakes' property and asked what the position was, and Mr. Noakes asked him to notify the Forestry Department, and I would say it would be somewhere in the vicinity of 4.30 p.m.

That is an estimate on your part?---Yes.

Just before we adjourned you said that you estimated the time of the telephone call at about 4.30 p.m.?---I had questioned the girl in the office; and I did take her name down. She told me she received a message at about 4.30, and she went off shortly after, at about 5 p.m., and left a message for the forestry officer; and when I questioned him he said he saw the message at about 5.30 p.m., as shown in his statement.

Do you know if there was any reason to believe that the forestry officer concerned and his men might have had any additional reason for not going to the fire? Had they been fighting other fires and were they exhausted and tired?---They had been out on a fire, and they had been keeping an eye on other fires. I cannot recall where it was but they had been out to a fire they said on that afternoon controlling a special burn. I did not know where that actually was. They returned at about 5.30 p.m.

You say that Mr. Holland notified the other people around there about this fire. Do you know if Howard Noakes helped him with that fire?---When he first reported it was out of control, do you mean?

Yes?---No.

He did not go?---No.

You say, "Other farmers in close proximity were notified by telephone. But at this hour they could not raise the Forestry Department, so they asked the Postmaster at Forrest Grove to notify the department as soon as possible"?---That would be getting on to the early hours of Thursday morning.

Did the other farmers turn out straight away to help to control the fire?---They did.

Was there any reason why the property of Howard Noakes was turned into a control point?---His property was turned into a control point when things got out of control. He was more or less left in charge of the telephone and that sort of thing. If any assistance came along he could have directed it from there.

I take it the forestry officer at Margaret River was Frank Henry Herbert Collins?---Yes.

You said that a little later he was notified at about 3.40 a.m. by Stan Walton of the seriousness of the fire, and that Collins went straight to the scene. So, any delay which occurred between the time he left to go to the fire was between 3.40 and 5.30?---Yes, according to the statement of Collins, he thought the fire would have been stopped by the fire break which is indicated on the plan, and a fire burn which had been put through not so long ago. Apparently, with the hazards which sprang up, it went straight through the spring burn.

On page 5 of your evidence you say that the second red line as marked on the plan, shows where it has burnt to by 6.30 p.m. on 2/3/61, so it was decided to drop back to the southern end of the Locations 2709 and 2710, also the west side of Location 2709, and burn back into the face of the fire in an attempt to saving the Boranup pine and karri forests. Who decided that?---Mr. Eastman.

Will you indicate on this plan where are those lines to which you refer?---They are here.

It extends over the main road to the east?---That is correct.

Would the forestry men be controlling?---Yes, Hollands and Eastman were controlling that area. That is where they tried to burn back - towards that area.

Who showed you that line as being the one from which they tried to burn back?---Mr. Eastman, and I also checked with Mr. Collins.

I understand Eastman was not at the fire at the time the back burn was started?---That is possible. He took over from Collins when he arrived.

If you checked with Collins that would be sufficient. You further say that that fire burnt around the northern and southern ends of this back burn. So it burnt at both ends and through farming areas, jumped over Caves Road, and was out of control in the Boronup forests. You added that the fire was out of control on the southern end of the back burn and was burning fiercely in a southerly direction. That would be east of the main road?---That was east of the main road.

You are quite clear, from what you gathered, that the Forests Department was handling this side east of the main road, as well as west of the main road?---That is correct. Previously they tried to put a back burn from Bull Ant Drive, which is shown on this map.

From the evidence you gathered, you are under the impression the fire, in addition to going around both ends, jumped the back burn?---I thought the back burn was under control. The fire beat them around both ends.

You received no evidence that it jumped the back burn? That could be important?---That was the impression I gathered from speaking to the Forestry officers and the fire fighters in that area.

I am more concerned with the fire fighters in that area than I am with the Forestry officers as they will be giving evidence. I was anxious to know if farmers told you the fire had jumped the back burn?---No.

You say that the Forests Department left this fire and went on to Treeton the following day?---That is correct.

You gave reasons why they did so?---That is correct.

It seems from your evidence you gathered that was the reasonable thing to do?---It was the most sensible thing to do. If the Treeton fire had not been controlled there would have been a terrific area burnt out. The map shows the fires in the south in comparison to the Treeton fire. If the Treeton fire had got into the area of the other fires there would have been nearly 20 to 30 miles of country burnt.

That would have been a much more closely settled area than the country burned?---It would have taken the township of Margaret River. The bush goes up to Margaret River.

You refer to Constable Sparks setting up a control point at an area marked "the Cross Roads". That is the cross roads at Karridale?---Yes, Herbert McDonald's place on the cross roads.

We have had reference to "the Cross Roads" in evidence?---It is the cross roads at Karridale. I marked it crossroads on the plan so there would be no mistake.

You say that after he set up his control point efforts were then made to save stock and houses in the face of the fire, and he had in fact to eject an elderly woman who refused to leave her house?---That was Mrs. Bushby.

When you say "efforts to save stock and houses", do you know what he did to save houses in the face of the fire?---He sprayed around them, and with regard to stock they were run into paddocks where there was a little pasture very close to the house. In fact, they tried to put a safety break around the stock as well. From my own examination of the different houses that appeared to be quite correct.

Do you know if they also stayed with the houses and sprayed them with water?---As long as they possibly could. When things became drastic I think Constable Sparks ordered them away as he feared there might be loss of life.

Do you know if Constable Sparks had any instructions to order an eviction?---No, I do not think he had any instructions, but in our general instructions in Police work we have to preserve life at all costs. That was the reason why I think he made an effort to get the people out of Karridale and houses in that area.

I asked that question because statements have been made in evidence that evacuating people from houses was not a sound idea; that it would have been much safer if they had stayed with the houses -- that it would have been much safer if the people had been there to tend to them when the fire reached them. The case of the elderly lady was one case where that person could have given help?---I think the Constable did the right thing. From what I understand from inquiries I made an inferno was going through. The fire spread several hundred yards in a matter of a short time and I think he did the right thing in getting the people out in the face of the fire. At that stage the weather conditions had become so cyclonic that it was almost impossible to stop the fire.

The theory has been put forward that although flames are 40ft. high, with the amount of clearing that is unavoidable around a house with the movement of people, so long as you spray the house with water when a spark lodges, that would be quite safe?---I disagree.

I was also told that no house occupied with tenants was burnt?---That might have happened, but I think under the conditions it was the right thing to pull people out to avoid possible loss of life. It might have been luck that the people who stayed with the houses got away with their lives. If I had been in Constable Sparks' position I would have done the same thing.

A statement has also been made in evidence that when the people were evacuated to the Cross Roads they were lodged in a place where there were stores of petrol and oil?---That is something I did not check. Constable Sparks would be able to enlighten you there.

On page 6 of your evidence you say that it was brought to Constable Sparks' notice that there was dissension amongst the fire fighters, and those in charge at the control point at Noakes' property at Forest Grove. I want to clear that matter up. Do you know what the dissension was about?---Apparently the men with one group seemed to think they should control the fire at one point and the other group thought they should control it at another point. There were three different factions. He thought it would be better for them to be working in unison rather than everybody going hither and thither. That was the reason he went to this control point in Forest Grove. One man was in charge. Mr. West had returned from holidays and arrived at 6 a.m. that morning. He immediately made Mr. West the control officer for that particular point.

There has been evidence given that there was dissatisfaction with the Police officer attempting to take charge of the fire fighting operations and ordering the placement of men and that sort of thing. Did you get any evidence of that at all?---Yes, I received a complaint from Mr. Busby, Fire Control Officer in the Alexandra

Bridge area, that Constable Sparks acted without authority in taking five men away from the Alexandra Bridge area where the fire was dangerous. From my experience, Constable Sparks' reason for taking these five men away was that he considered the fire to be more dangerous in the Karridale area than it was in the Alexandra Bridge area.

Were these five men working under the fire control officer?---Yes, I understand so. Constable Sparks took control at the point at the Cross Roads. When the Forestry men were there everything seemed to be running smoothly; and when the Forestry men went to the Treeton fire, which was the most sensible thing to do, everybody was looking to see who was in charge. Constable Sparks said, "Let's get cracking." He took control of that point. When he received a report of Alexandra Bridge being dangerous, he went down there to see if anybody was in danger and if there was any loss of life likely to occur.

Would your investigations have led you to the conclusion that once the Forestry crew left that fire, the local fire controllers seemed to be lost and unable to organise themselves to meet the situation?---Well, that was the general thing Sir. They did not have a complete leader -- one who was the supreme leader. They had several officers there but did not know who was, in fact, the senior man to get things organised.

You refer to the Forestry people and the possibility of their controlling the fire east of Bussell Highway, but you are referring to some distance away from the highway before they put in the break which was overrun?---Yes.

You saw Mr. Peter McLoughlin's permit to burn?---Yes.

Like all the other permits it was filled in correctly with the date on which he was to burn and the location numbers on which he was to carry out the burn?---Yes.

He said he had notified his neighbours. Did you check that with the neighbours?---His nearest neighbour is the fire officer who issued the permit and Shirley Miles had been notified. I checked that.

He apparently did not notify the secretary of the local authority?---No, he did not.

In fact it seems to have been a general thing that they do not bother to notify the secretary?---As long as the fire control officer knows about it, that is all they worry about.

In regard to Mr. McLoughlin's fire, did you see any signs of a break having been put around it before he lit it?---No. It was 11 acres of pasture country with odd dotted dead trees in it, and there was bush on the north side and the west side of the 11 acres. In the bush country there was a strip of about 5 chains which ran into the Blackwood River.

So he did not have a fire break around it, he notified his neighbours, but did not have any assistance?---No.

And he did not stay with it until it was safe, apparently?---No. The bush country that burnt was right around the east of the Blackwood River -- that strip which ran down into Shirley Miles' place. But then it came to the position where he put breaks nearly across to the Blackwood River but there was a strip of country which Shirley Miles wanted burnt, so he did not put a break through at all. So it went down through that strip, burnt further south, and got out of control.

And that bush country which it went through was private bush and not Crown lands?---No, it was private bush.

Whose was it?---Both his and Shirley Miles. Then it came down into Sunday's property.

Should that name be "Sunday" or "Sandy"?---It was given to me as Sunday.

You refer to fire control officer Campbell as being very deaf. Around what age would you say he was?---55. He wears a hearing aid also fur he is still very deaf with that.

You said that he was completely deaf and I thought he could not be completely deaf. He must be able to hear something with the help of the hearing aid?---That is the only time he can, but it took me six hours to get a 2-page statement from him.

In regard to Marsh's fire, why did he consider it was safe to burn only if there was a north-east wind? Was it because he did not have protection everywhere?---He thought it would get out into the bush country on the east of his property if it burnt at any other time and that was the reason he wanted a north-east wind.

I appreciate that, but I would naturally come to the conclusion that his other boundaries could not have been safe. In short, he could not have had adequate protection around them so he was not prepared to light a fire. If a man lights a fire it may move in any direction before it is extinguished?---Yes.

Did you look at his boundaries?---No, I must be truthful. I did not go to that boundary where it started. He showed it to me from a distance, but I had such an area to cover that I did not go to his boundary there.

I do not expect you to cover all the country. Did he not notify any other neighbours except his father?---His father and his brother. His brother's property is north-west of there.

Were they his closest neighbours? Did he have no other neighbours but those two?---No. There were the Paynes on the south side. They had been notified. But they did not go to assist him when he put the fire through.

I appreciate he had no assistance. Marsh had assistance. He had Harry Millington and his own brother?---Millington is another neighbour.

When you say Harry Millington and his brother Harry, you mean Marsh's own brother Harry?---Yes.

You say, "During November 1960, Marsh had put a spring burn through timber in Location 2448 just south of where he desired to burn this pasture", and that that was why he thought it would be safe. Did you have a look at that country to see whether the fire did go over it at all?---It burnt up to it and then stripped up to the burn where he had put it through, but it went around the east side of the burn where in fact, to my way of thinking, the spring burn had not gone through properly, and that is where it got out of control and swept south.

So it burnt over some of the country he had spring-burnt?---That is correct.

And the country not burnt through on the south, was that well burnt?---Yes.

You say it burnt through that country at midnight. I feel that in that case it could not have been well burnt before if it went through at midnight unless it was particularly hot?---Well, the cyclone was starting to

work up by that stage. Marsh's fire was on the 3rd, and it was 98 degrees at 4 o'clock in the afternoon.

But then you say on page 9, in about the fifth paragraph, that it burnt into a fire on the south-west side from Bell's property and burnt into a spring burn owned by Norman Scaddon in locations 3739, 2480, and 2759, and was brought under control.

This Spring burn was good enough to stop it?---That was a good Spring burn. Scaddon is the fire captain down there and a very reliable type of man; and that Spring burn which he put through there was very good.

You do not happen to know how long it had been burnt through before?---I do not know. I had a look at that Spring burn and I do not think a fire would go through it.

Then we come to Cusack's fire. He was assisted by a neighbour, Victor Castle; and the next day, when he lit the main fire, he was assisted by Gordon Payne. But in both cases he only had one helper?---That is correct.

You say, in connection with that fire, that he had previously put in ploughed firebreaks around the whole area he wanted to burn. Can you tell me what those firebreaks were like?---They were good firebreaks, I think, on the south side. He had put ploughed breaks on the east side.

You say that firebreaks were put on the south side about six chains wide. They were burnt breaks?---Yes.

He had previously put in firebreaks around the whole area he wanted to burn?---The other three sides were ploughed firebreaks; on the other side it was about six chain width of burnt break.

It was a good burn?---Yes. It was next to one of those trees on the east side. This tree was right on his ploughed firebreak. The tree burnt up and there was a limb hanging over the break which dropped into half bush country, and it swept into the bush country and got into State forest No. 63.

The State forest was one of his neighbours?---On one side. Castle was one of his neighbours.

He did not notify the Forests Department?---No.

This regulation, which requires a man who lights a fire, and has a permit, to keep men in attendance at the fire until the fire controller declares it to be safe -- they do not seem to have observed that regulation at all in any case you

encountered?--In those Nillup-Courtney areas it would appear that when they--different farmers started their fires and they thought they were reasonably safe. They would get called away to go to another fire which was out of control. They would be fighting that fire and they would find that their fire was out of control. They would be called back and they could not control it then. But, generally speaking, I do not think the farmers did control them properly, as I have mentioned in a recommendation later.

I can understand that there might be certain difficulties in getting a fire control officer to come along when you want him, to say whether it is safe or not. Did you get the impression from your investigations down there that it was so seldom that anybody was prosecuted for breaches of the Bush Fires Act that people feel these breaches are condoned?--Not altogether. I know that last year there was a farmer prosecuted for six breaches down there, and he is still going crook for being prosecuted. As a matter of fact, he went crook at me.

What was the basis of his complaint -- just because he was the one picked out of a number of others who had done the same thing?--Apparently there was an old sore running between two farmers alongside one another. He wanted me to do something about the other gentleman. I told him that I was investigating the fires and would not do anything about it. He was not affected by these particular fires; I had come across him in my investigations.

That seems to be the basis of his complaint; he was investigated and the other man was not?--Yes.

You say that on Wednesday evening Cusack went to Augusta, returning home about 8.30 p.m. when he noticed the fire. Somebody else went to Augusta. Do you know if there was any urgency for them to go to Augusta?--No, I do not think there was any particular reason.

Still dealing with Cusack's fire, you say that the fire only burnt in about a mile in timber country south of Brockman Highway? Was that Crown land?--Yes.

And I presume that being Crown land there was nothing put around it in the way of protection?--No; not down there.

Coming to Payne's fire, you say that he had nobody to assist him other than his wife and family of six children?--Yes.

The regulations require you to have three men in attendance in total. How old was the eldest of his children, roughly?--About between 15 and 16.

Male or female?--Male. They have another son about 14. The Paynes have been supplying all the posts with regard to the fencing for down there, and those two boys can split posts as good as any man I have ever seen.

They would be quite capable boys at a fire?--I would think so.

You say that during Tuesday night this area burnt satisfactorily, but during Wednesday this fire started off in swampy bush country. Do you know if Payne was present when the fire escaped?--No, he was not present. He thought it would burn itself out. He was at the house. He went and had a look at it and then he notified Mr. Busby who was fire control officer in that area.

How far would the house be from the fire?--About three-quarters of a mile--half-a-mile to three-quarters.

Do you know what firebreaks he had around the area he wanted to burn?--I understand he burnt back along the area he wanted to burn; but his actual firebreaks, I do not know.

Bell's fire: Do you know if Bell notified his neighbours at all?--Yes.

All of them?--Yes.

But probably not the secretary of the local authority?--No.

Because the Bush Fire control officer knows they are going to burn, he gives them a permit; so they do not particularly notify him again that their going to burn?--No. The only person that I know of who notified Mr. West, who was the chief fire control officer, was Mr. Holland.

I see. Do you know what his firebreaks were like, around his fire?--Bell's?

Yes?--On the north it was pasture land. He had put firebreaks around there.

Ploughed?--Ploughed. That was location No. 4055.

On the other sides he did not have any breaks at all. The three men controlled it. They burnt back into the area.

He did not have a raked track even around ?-- From inquiries I made, no.

Do you remember the width of the break that he did put in ?-- It was two plough widths.

How many furrows would that be ?-- I would say about 14 feet wide. It was pasture land on the north, and they controlled it very well. It never jumped over there at all.

Do you know what assistance, if any, McClure had when he lit his fire ?-- None.

He started off all right. He put his burn through successfully, and the following morning, you say, he went around and checked it and everything looked safe, and it was not until Thursday that things started to happen. How did he control his fire? Did he have fire breaks around the area ?-- It was mainly pasture land there with an odd tree. That was the 11 acres that he wanted to burn. On the north side he had a spring burn that had previously been put through. On the west side he had that road and also the ploughed breaks put in by Mr. Harvey, and on the south side he had a creek. It was fairly cleared land on the east side. So he was very unfortunate that the fire actually got away.

From your inquiries and observations of the burnt out areas, you have enumerated a number of factors that have probably had a bearing on such a large area of land being burnt out. One is that the local authority did not extend the opening date of the burning season for 14 days which it had power to do under the Act. From other evidence you have given, the forecast for the weather on the 27th and 28th - two days after the season opened - indicated rain ?-- That is correct.

Was there any reason why they should have extended the opening date in this case ?-- My reason for

putting that in is because it was such a long dry summer, and things were so dry that if there had been a shower of rain it possibly would have made things a little safer; and with the 14 days to the 13th March, it would have made things much safer.

It is easy to see how handy it would have been had they done that. But there is some reason I think to look at that a little reasonably and say that in that district where the damp season usually comes in early they were expecting every day this would happen, but it did not in this case ?-- The general apathy was that they were forecasting rain - it was coming up, and there were cloudy skies and it was thought it would be there. That is why everybody lit up, thinking the rain would control things after the fires were going.

Have you any reason to think the advisory committee might have extended it by 14 days if it had been consulted ?-- I was speaking to them after everything had happened. They definitely said they would have advised for the 14 days to be put back. But everything had happened then and all the damage had been done.

How long has that advisory committee been appointed, do you know ?-- I do not think it has been appointed for very long. There are six members of the local committee who have farms in the area and hold a responsible position.

Did Mr. West or anybody else say why the advisory committee was not consulted ?-- I did not ask him, but from the general conversation I carried on with him, he thought everything would be all right; the rain was coming. That is the reason why he did not take the necessary action which he could have taken under the Act.

Then you say the fire control officer appointed should have restricted the number of the permits issued on the opening of the burning season. You feel that some, at least, issued too many permits to burn on the same day ?-- I think so.

There again they were probably influenced by the fact that rain was forecast and the wet season might set in before

they could get their burning done?---That was the general apathy.

The forecast seems, to some extent, to be responsible for misleading them?---Yes. I think the forecast was: Cyclonic conditions developing, and I think they said there was rain coming. It said there were cyclonic conditions developing, but I think those conditions did not develop until the Wednesday, or did not get going until then, and really hit on the Thursday and Friday.

Do you think the people down there would appreciate what was meant by saying that cyclonic conditions were developing?---I do not think so. I think that all they heard was: Rain coming, and that is all they were interested in. They wanted to get their burning done.

You speak of dirty bush country which includes private, Crown and forestry country. It would appear there had been insufficient spring burning over the years. Would you single out anybody, particularly out of the private, Crown and forestry as not having endeavoured to do a reasonable thing with their spring burning?---The forestry have done some. Mr. Scaddan has done some. Apart from that, very few people have done any spring burning at all, from what I can gather, for some considerable years.

Of course Crown lands may not have had much done on them unless their neighbours did it. But in regard to bush country owned by private people, are there any areas in particular that should have received attention, but which did not?---On all that area there should have been some spring burning done. I think perhaps as far as the private individuals go, the only person I could single out from those I interviewed was Mr. Scaddan who had taken the necessary precautions.

There are some large areas of bush country down there?---Yes; terrifically large areas down there.

Privately held?---Yes.

You speak of the general apathy by farmers in some areas with regard to bush fire control. I am wondering whether you formed any conclusions with regard to what parts of the road board were more apathetic than others. I say that, because the people around Karridale have stated in evidence that they are particularly good with their fire control work and practically do not have fires there unless someone else lights them and they come in on them. From your travels you say there was a lack of fire breaks throughout the area and you did not see a fire break over a distance of several miles?---That is correct.

Would that apply generally throughout the area?---You would find an odd farmer who would do the right thing. Generally speaking they did put a ploughed fire break around that was about four feet wide and they seemed to think: We have put a fire break in; we have done the right thing as far as the Act goes, and that is it.

But there were miles and miles of country -- particularly on the Bussell Highway -- where a lot of fire breaks had gone in now after the fire and when I asked, "Was there a fire break in here?" they said, "No, that was put in when the fire was over."

You said that there was a lack of communication. What sort of communication -- wireless and telephone?---Yes, telephonic communication. Many farmers there are very isolated. They are well out of the way and to go for their stores they have to go for miles and miles.

Do most of them possess motor vehicles?---Yes, but there are no communications. If they want to talk with their neighbour they must travel by their vehicle.

There is no suggestion that any of these people should use wireless sets of any sort such as are used in the inland?---There are some farmers whom I would not trust with a wireless because they have lived in the outback for so long, but there are others who are very sensible.

Then you say that there is a lack, by farmers, to adhere to the radio broadcasts of dangerous fire hazard. That seems to be fairly general, does it not?---Yes.

Those two days on which the forecasts were given were not dangerous fire hazard days, were they? You recall that?---No, but I can check that.

I would be glad if you could. If you can tell me which were the dangerous fire hazard days after the 26th February, it would be helpful?---I have the information from the 27th February. Mr. Mackey divides these two areas, where the fire occurred, into the south coast area and the lower west coast area. The lower west coast area extends from Margaret River in a line across to the Blackwood River, whereas the other one, the west coast area, is the one extending from Margaret River to Mandurah. I tried to get both of them because the Treeton fire was north of Margaret River and that is the reason why I got the two forecasts in the different areas, although there is not much difference in the two areas.

If they range from Margaret River to Mandurah there is room for improvement?---That is correct, but at Treeton there is not much difference between what the south coast area would be.

If you can give me the fire hazard forecasts for those districts for the three or four days, they would be helpful?---On Monday, the 27th February, 1961, the fire hazard for the south coast area was "average to high". In the lower west coast area the fire hazard was "high to severe". That is, at 6 am. Then, at 5 pm, in the south coast area the fire hazard was "moderate". On the 28th February, at 6 am, in the south coast area, the fire hazard was "moderate" and, in the lower west coast area it was "average". At 5 pm, in the south coast area, it was "moderate", but in the lower west coast area it was given as "high to severe". That was at 5 pm on the Tuesday. On Wednesday, the 1st March, in the south coast area, at 6 am, it was "high to severe", and in the lower west coast area it was "severe to dangerous". At 5 pm, in the south coast area it was "severe to dangerous", and in the lower west coast area it was "dangerous". There is also a special warning put in there, reading as follows:-

> Cyclone warning given during the morning,
> cyclone 200 miles west to south-west of
> Carnarvon, moving south to south-east and
> evening warning cyclone 450 miles west of
> Geraldton moving south to south-west.

On the Tuesday evening, at 7 pm a special warning was also issued as follows:-

> A special cyclone warning was forecast at 7 pm.
> Cyclone centre 300 miles west to north-west of Carnarvon.

That was on the Tuesday evening and then they gave another warning on the Wednesday morning, followed with another on the Wednesday evening, stating the position of the cyclone, as I have already stated.

And what about Thursday?---On Thursday, the 2nd March, in the south coast area at 6 am, the fire hazard was "severe to dangerous" and in the lower west coast area it was "dangerous". But there is a special fire warning given on that particular day; that is, on the Thursday. It is --

> Fire Warning: Dangerous fire hazards exist in all areas
> except along extreme south coast where hazard is severe.

Would you read that to mean that although the fire hazard forecast was "severe to dangerous" in the lower west coast area there were parts in that area where it was dangerous?---Yes.

Can you tell me how the farmers would regard that forecast of "severe to dangerous" on the previous day? I would expect them not to regard it as a dangerous fire hazard and therefore they would not have to refrain from burning?---That is their general thoughts on the matter, but on going through the different weather reports on the different days it is quite noticeable how the winds have switched and how they have become more intensive. For instance, on the Wednesday, at 6 am, with the fire hazard "high to severe" there were east to north-east winds at 20-30 miles per hour. That was for the south coast area. The force of the wind was the same in the lower west coast area. At 5 pm on the same day, in the south coast area, with the fire hazard at "severe to dangerous", the winds were east to north-east at 25-30 miles per hour with gusts up to 50 miles per hour and in the lower west coast area, with the fire hazard at "dangerous" the winds were east to north-east, from 20-30 miles per hour. On the Thursday, the 2nd March, with the fire hazard "severe to dangerous", the winds were travelling south-east to north-east at 25 miles per hour, with gusts to 40 miles per hour and, in the lower west coast area, the forecast was "very hot with strong and occasional gale force north-east winds. Fire hazard -- dangerous with north-east winds, 25-40 miles per hour with gusts to 50 miles per hour." Starting off on the Monday, the winds are ranging from 10 to 25 miles per hour and they gradually

intensify until, on the Tuesday, they get up to 15-20 miles per hour in the evening and then, on the Wednesday they get up to 25-30 miles per hour, with gusts up to 50 miles per hour, and, on the Thursday, the wind is really up to 50 miles per hour.

You say --

> More power should be given to local fire control officers and fire captains to make sure that farmers spring burn all scrub country which has become hazardous.

Have not the fire control officers got all the power necessary in that direction now?---Yes, they go through their local authority. But there is the neighbour alongside. He might go up to his neighbour and say, "What about burning that area so that we can be completely safe?" and he will reply, "I will get around to that some other time." Or he might make some excuse or other. The local fire control officer does not like making a report to his chief fire control officer for the district. That is why I mention that.

He does not like making a report to his chief, and yet you suggest he should be given more power?---Take the example in the Courtney-Nillup area, where there are two responsible men in Scaddon and Busby, who in my opinion try to do the right thing; and yet many farmers there do not take any notice of them whatever. That is the only reason for putting that piece in.

Referring to radio forecasts: It is hardly reasonable to expect farmers to be available to receive radio forecasts other than in the morning?---No, but I have called at farms at midday and I find they usually listen to the midday news.

They get back for lunch?---Yes. They listen to the midday news and very often one is not allowed to talk during that time.

It seems to me that if you have the forecasts in the morning and the conditions change in the day, he would be alive to it and want to get back to see what the position was. You would not consider it inopportune to try and burn on the 27th and 28th in view of the forecast?---No, not in view of the forecast. All they were interested in was the fact that rain was coming.

During your discussion with the farmers there, did any of them suggest ways which might be helpful in avoiding these dangers and difficulties in the future?---Many farmers in fact made criticism of their neighbours for not spring burning. Others criticised the Forests Department for not putting more spring burning through, and they criticised the fact that nothing had been done about the Crown land which had been left without any spring burning at all.

The fact that there was no spring burning was their main trouble?---Yes.

Actually, the fires all got away because of their failure to have adequate precautions taken around the boundaries?---That is correct.

But in suggesting that the fire control officer, when he issues the permit, should check to see that they will have the necessary assistance at the fire, or advise them of their responsibility or visit them during the burning, what do you mean?---The only reason why I did not think Campbell should be a fire control officer was because of his deafness. From my questioning of fire control officers I found that they had stipulated those things on the back that should be carried out, and quite often you see a mark in many places which indicates, "Here it is, you do something about it."

Apart from Mr. Campbell, did other fire control officers appreciate the need to restrict the number of permits they issued for burning on a particular day?---Yes, I think so; although in a couple of places I have criticised the fact that too many permits had been issued for the 27th, which was the burning day. I thought perhaps if three permits were issued on the 27th for a particular group and having got that under control, then you could issue another permit for the 29th and get those fires under control. That is why I suggested that too many permits had been issued on the opening day. It would appear that when everybody heard the forecast that

rain was coming, they said, “Give us a permit; we want to burn off 20, 30 or 40 acres”, as the case may be. The fire control officer heard the forecast that rain was coming, and he just wrote out the permits.

I think it is understandable in places like that that there would be great pressure to get the burning under way?---That is possible.

(The witness retired).

Sitting suspended for lunch.

ALLEN HERBERT SUTHERLAND,
Recalled and further examined:

BY THE COMMISSIONER: I understand you wish to tender some exhibits?---Yes. The first is a plan showing the prohibited burning times declared in the respective zones.

EXHIBIT — EXHIBIT Q : Zone map of burning periods.

The next exhibit is a circular relating to building protection sent to local authorities. It was not a circular but an individual letter which was varied in small details, but not in respect of the building protection portion.

EXHIBIT — EXHIBIT R : Circular to local authorities on fire breaks and fire protection by the Bush Fires Board.

The next exhibit is a classification of the districts. This is rather arbitrary. Various items stressed as unsatisfactory might be more severe in some districts than others. Some districts which have an unsatisfactory classification in some particular might be very good districts.

EXHIBIT — EXHIBIT S : Classification by the Bush Fires Board of the administration of the Bush Fires Act by local authorities dated 1960/61.

The next exhibit contains summaries of the fire reports for four years, up to the present one. In the present one we are taking out the fires by districts.

EXHIBIT — EXHIBIT T : Fire losses for each year from the 1st June, 1956, to the 30th April, 1961.

(The Witness retired)

REGINALD CHARLES MYERS, Detective,
Criminal Investigation Branch,
Perth, sworn and examined:

THE WITNESS: As a consequence of complaints received by the Swan Road Board I attended and made inquiries in the Gidgegannup area of the consequence of bush fires that swept through that area on the first, second and third days of March this year. I submitted the report to the Commissioner of Police. I attended the coroner's court recently. I gave evidence in the coroner's court. This file contains the deposition of my evidence. I tender it to this inquiry.

EXHIBIT EXHIBIT "U" Deposition of evidence submitted to Coroner's Court by Detective Myers.

BY THE COMMISSIONER: All these matters you have here I understand have been either placed before the coroner in the recent inquiry into the Gidgegannup fire or consist of a report to your superiors of the overall position with regard to the causes and origin of that fire as you were able to ascertain them. Is that correct?---Yes. I now produce a file which is a copy of all statements taken by me of witnesses that were called by the coroner to give evidence in the coroner's court regarding this fire. I, myself, submitted a typewritten report to the Commissioner. This report generalises on the evidence of all the witnesses. I also submitted a report concerning damage and complainants; and also a further report depicting photographs, charts, and lithos which were exhibits taken by me in this inquiry. I submit this report.

What is the number of the file?---61/4987, C.I.B. File, Perth.

EXHIBIT EXHIBIT "V" C.I.B. File 61/4987

THE WITNESS: I now produce plan marked Exhibit "B" in the coroner's court prepared under my supervision by a police draftsman. The reason for the plan I have outlined in my report and also in my evidence to the coroner. There are two litho types. Both of these were exhibits in the coroner's court. One is marked Exhibit "U2". It is Litho 1B.40. I have referred to this in my evidence to the coroner. It indicates Goldman's

property and also fire damage from Goldman's property to O'Brien Road, Gidgegannup.

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| EXHIBIT | EXHIBIT "W" | Litho. indicating Goldman's property and fire damage from such property to O'Brien Road, Gidgegannup. |

Litho. 1B/20 S.W., Coroner's Court Exhibit UI, is a plan showing the fire damage from O'Brien Road down to the Darling Range foothills bounded on the south side by Toodyay Road. It is also referred by me in the deposition to the Coroner's Court.

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| EXHIBIT | EXHIBIT "X" | Litho. 1B/20 S.W. being a plan showing fire damage from O'Brien road to Darling Range foothills. |

Exhibit K in the Coroner's Court is a photograph I had supervised with a Police photographer. It is a panoramic view in a stock race area facing north in Goldman's property. I have referred to this in the Coroner's Court. It shows on the eastern side and northern side of his property no fire damage and on the western side of Goldman's property fire damage. The centre of the picture indicates the approximate position where it is considered the fire started.

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| EXHIBIT | EXHIBIT "Y" | Photograph being a panoramic view facing north in Goldman's property. |

Nine photographs were taken as exhibits in the Coroner's Court.

BY THE COMMISSIONER: Could you say roughly the purpose of those photographs?---Two are to show the remains of a burnt red gum tree that had been sawn down, this red gum being the one struck by lightning. Coroner's Court Exhibit M shows the remains of the tree and will show that it has been subject to an intense fire. Exhibit L shows the same tree and in the background a tree of comparable size. I have marked this and referred to it in the Coroner's Court. A comparison between the two will show that the tree in the foreground was the one struck by lightning and had been subject to considerable fire.

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| EXHIBIT | EXHIBIT "Z" | Nine photographs depicting in particular the red gum tree struck by lightning. |

BY THE COMMISSIONER: The Commission proposes to accept without question the evidence which has been submitted to the Coroner's Court and the decision of the Coroner with regard to the cause and origin of the fire at Gidgegannup. But can you tell the Commission anything about the spread of that fire?---Yes. A witness was called in the Coroner's Court named Mr. Mackey who is Deputy Director of the Perth Weather Bureau. He gave evidence that on the day in question when this fire started and originated from Goldman's property, the wind velocity was 32 miles per hour. He gave evidence that that was a class 7 wind and would be designated as a near gale force wind.

That was the day it escaped from Goldman's property?---Yes. And also that at about 12.30 or 12.40 -- I cannot remember the exact time -- gusts of wind up to 45 to 47 miles an hour were recorded at the Perth Weather Bureau. Taking into consideration the strong winds coming from the north-east, this would cause a fire to travel very rapidly and burn in an arrow shape, the face of the fire going very quickly with the wind and cause the sides of the fire to burn out gradually afterwards. This fire definitely would not burn back against the wind in trees or in heavy bush country to any degree at all, but possibly would burn back slowly against the wind in grass country or, as on Goldman's property, in low feed and stubble. The fire from Goldman's property, indicated on the litho. which was Coroner's Court Exhibit U2, shows where the fire started from Goldman's property, and then as it travelled in a south-westerly direction the area becomes wider and wider and wider and travels right down to the Darling Range foothills.

That is information you have deduced from what you have seen of the fire afterwards, or from what you have been told?---From what I have seen afterwards and taking into account the weather conditions, and also on

this day the temperature was referred to as 105 degrees. On the two preceding days -- Monday and Tuesday -- the temperature was in the high 90 bracket, and I have also taken into consideration the temperatures, the velocity of the wind, the evidence of witnesses, and my own observations of the fire burnt area.

Can you tell me anything of the measures taken to control the fire?---No, I am afraid I could not give the Commission anything on that. When the inquiry was first given to me, my concern as an officer was to find out who was responsible for the fire and the cause of the fire.

Can you tell me anything of the total area burnt and the losses sustained? Did you go into that question?---I made a rough calculation of the area. In the Coroner's Court I referred to possibly 18,000 acres of burnt country. I came to that conclusion on speaking to the fire control officers of the area and after having taken certain measurements to work out the acreage.

Have you any ideas that might assist the Commission with regard to protection of property? Did you obtain any information as to why certain buildings burnt down and others did not, or anything of that nature?---In this fire, taking into consideration the extreme temperatures, and on this day the velocity of the wind -- I might say beforehand that I know several of the farmers did have fire breaks -- I do not think any fire break under these conditions would have been of any effect at all.

I think that is all you can help us with for the time being. Thank you for coming along. I am sure we will find what you have given us very helpful?---Thank you.

(The witness retired.)

RICHARD KILCAR SMITH, Orchardist,
Lower Chittering, sworn and examined:

BY THE COMMISSIONER: Would you give the Commission your full name and address?---Richard Kilcar Smith.

And your address?---Lower Chittering.

Your occupation?---Orchardist.

Are you a bush fire control officer?---Only by the board, but I do not take any active part in it.

You do administer to the extent of issuing permits?---No; I do not taken any active part at all.

Are you the chief fire control officer for the district?---No; I am only here as representative of the Regional District Council and the Swan Board, - what was written in the paper - suggestions you were asking for. Mr A.M. Pickett is our fire control officer.

Proceed with what you have to lay before the Commission?---Yes. Actually, the regional district council consists of Gingin, Wanneroo, Dandaragan, Lower Chittering, and Swan Road Boards. They are all represented. In "The West Australian" on the 15th May, I think, you asked for suggestions that would be of benefit to the district in the event of trying to prevent fires. They have asked me to present the case here.

I do not think it would have been the 15th May?---I have it here.

Towards the end of April?---That is when our fire started.

The Commission did not come into existence until the end of April?---Our fire was on the 15th May -- 15th December; I am sorry. What we were actually speaking about was the measures which are necessary and desirable to be taken by any, and what persons, corporations, and bodies --

That is one of the terms of reference of this Commission?---Yes.

You propose to speak to that on behalf of - - ?---The Regional District Council and the Swan Road Board.

Is it the Regional District Council? Has it got no other name? Is it not the Northern District Regional Council?---I think it is -- I am not too sure.

You have told us the district it covers, and that will be sufficient?---We were thinking of prevention for the Lower Chittering, Toodyay and Gidgegannup areas -- they have their training ground of approximately 33 or 34,000 acres.

You mean Army training grounds?---Yes.

Do you know if that is Commonwealth territory, or on lease from the State?---I think it would be Commonwealth territory. I think they bought 27,000 acres from the Midland Railway Company, and I do not know where the balance came from -- from Toodyay, apparently. We were hoping the Army could see its way clear to put a break -- a bulldozing break -- up to 12 feet -- with a big machine, from 7 to 12 feet - around the perimeter, and 5 chains apart.

Two fire breaks, chains apart?---Yes. The bush fire brigades -- that would be five I can speak of for the Swan -- I think the Chittering and Toodyay wards would be prepared to burn in between those breaks at the right time of the year; we feel that that would be protection for the whole of the valley right around, and also Toodyay and Gidgegannup. The Avon River runs through the centre of this, and it is very heavy and thick through there. We have other properties -- once it gets on top of a hill -- it is a big piece of country. If it is cleaned out it would give us more protection.

Would you be more definite? You said that the Swan Road Board would be prepared to burn, and you said the Toodyay and the Chittering Road Boards?---Not the Board -- the bush fire brigades.

Of those three road boards?---Yes.

Can you say definitely they would be prepared to do it?---Our five will.

The five of the Swan?---The Swan brigades will.

You are not sure of the others?---No, I am not sure, but I believe they would; I believe the Chittering board would be quite prepared to burn in between there, because we join one another and we know what it is to be fighting fires there.

That is all you have for the Commission?---That is all.

Can you tell me something about the type of country involved; is it difficult country to put a fire break around of that nature?---It would be very difficult.

Is it practical to put two ploughed lines around the exterior of the country?---Not ploughed -- bulldozed. I think it could be done. The engineers are doing wonderful jobs up there. I don't know whether the Army would; but they probably would give them that as training; and we are not really worried if it doesn't get quite on the boundaries as long as we can get some protection around the farms.

Do they use that area for the firing of live ammunition, or shells?---I think they have quite a lot of practice out there -- hand grenades, etc. I could not be 100 per cent. correct on this, but somewhere about two or three years ago there was a small fire started there with hand grenades, but they successfully put it out before it did much damage.

The Military?---Yes, the Army.

BY MR. McARTHUR: Is there any requirement under the Bush Fires Regulations which prevents the Army undertaking firing exercises during the prohibitive burning period?---That is something I couldn't answer; I wouldn't know.

BY MR. McARTHUR: Do they undertake exercises?---Yes, they do. We could speak with authority on the air Force. On their bombing range they have a cleared firebreak -- of course it is in different country -- of 60 ft. right around the bombing range. That is cleared and ploughed and looked after correctly. Around the Air force in parts it is 100 ft. Of course the Army is different and the country is different altogether. One is on sand country where it is quite easy to do these things, and the other is in very rough country which is exceptionally hilly and is difficult to work in. That is why we are asking for protection; because it is so hard to control fires in that country.

(The Witness retired)

R.K. SMITH,
16/5/61.

AUGUSTUS MILTON PICKETT, Farmer-Orchardist "Chittering Park"; Lower Chittering Road, Lower Chittering, sworn and examined:

BY THE COMMISSIONER: You have given your full names?---Yes. I am commonly known as Gus.

You have prepared a statement to present to the Commission?---I sent a statement to the road board, and I believe they sent it on to the Commission.

I have a copy here; have you a copy?---Yes.

Will you proceed to read it?---Yes.

I am a farmer-orchardist and reside on "Chittering Park" on Lower Chittering Road.

I am a Fire Control Officer for the Swan-Guildford Road Board area.

On the 16th December, 1960, at about 4.30 p.m. I received a telephone call from the Lower Chittering telephone exchange asking me to report to Bush's to help put out a fire.

On arrival at about 4.45 p.m. about 16 men made up two parties; one party went to Gray's property and worked along the western side of the fire burning in a southerly direction. I went with the other party starting from Bush's and working north met up with the other gang and finished up about 2 a.m. on the 17th.

On the 22nd December I was with a party of men and we put out a small portion of a fire burning on the west side of Army land.

I then took two men and we followed the fire on the east side and found the fire had jumped the road to "Moondyne", but still had two or three tracks to jump before there was any danger to the settlement.

We could not do any good on the east side at the present stage because of the state of the timber of which there was so much cut timber on the ground and the fire hazard was too bad. The fire was burning well out in Army land and towards the Avon River.

While inspecting the fire two forestry officers came along and I asked if they had come to help us put the fire out and they said "No", they were checking on the forestry country and were going right through to the other side.

I said to them when they got through to 'phone the Army and tell them the fire was burning on their land and to send some men up.

I was called out again on the 24th December and we fought the fire around Bush's and Yozzi's properties and got the fire under control about 7 p.m. We left men on patrol and I was called out again at 12 midnight, 24th, and went home about 2.30 a.m. 25th.

Four Fire Officers met at 5 a.m. on the 25th December to see what could be done about the fire. It was decided to roster men to watch the area around Bush's and Yozzi's properties. A Fire Officer was left in charge of each shift.

On the 26th December it rained and quietened the fire down and on the 29th and 30th December I noticed smoke out in the Military land.

Jim Read rang me about 9 a.m. on the 1st January to tell me the fire was coming down behind Don Craig's. He said there was no fire officer handy and what should he do.

I went and inspected the fire and thought we had until about 6 p.m. before the fire came down into the valley, because of the rough nature of the country and as it was burning down hill and not much fire hazard to burn.

I told Jim Read I was going to the telephone exchange to ring up and ask the exchange to ring everybody in the district and tell them to report at Craig's gate at 4.30 p.m. that afternoon and to stand by if called upon. He advised me that about 20 people were left in the district and gave me their names.

I was leaving the exchange when I saw Ralph Harding go by and I had just got back to Read's and he (Read) told me that the fire had jumped the valley into Bantock's paddock.

I am not sure whether he told me that. He told me it was in Bantock's paddock, but he might not have told me it had jumped. But in my opinion it had jumped. My statement continues --

The fire had jumped about a mile across the valley. Ralph Harding was the first there.

I went to Bantock's and asked the exchange to call all the men up and the R.A.A.F. There was only about 10 men available at the R.A.A.F. and they attended.

I went out and started directing men in different parts of the fire and noticed the fire was going to be a danger in different parts of the area and so asked the exchange to put a call out to the A.B.C. Broadcasting Station to put a call out for all men and to return home to their properties.

I did that on account of the holiday and some of the exchanges being closed. To continue --

We got the fire under control about midnight on Jan 1st after quite a lot of damage to fences, orchards and pastures had been done. About 60 men attended this fire.

About 6 p.m. on the 1st January about 20 men went up to the Military section of the fire again to see it and put it out on the north side up as far as Yozzi's and on the west side behind Craig's. The fire was still burning on Military land.

We got back about 2 a.m. on the 2nd January to the road and two Army men came along to inspect as they were bringing up about 50 men at 10 a.m. on the 2nd.

A.M. PICKETT,

That is an error there, really. It does not make much difference. We met the two Army men up in the hill before we got down to the road. To continue my statement --

We told them to make their headquarters at Beale's packing shed.

About 6 a.m. on the 2nd January about 10 of us went up to inspect and patrol the fire.

I reported back about 9 a.m. to meet the Army and sent men up to relieve the men already patrolling.

About 50 men, local men, turned up that morning, but could do nothing at that stage as the fire was still burning on Military property and could do nothing until it came into more suitable country to fight it.

I went with Lieut. Jeffreys in the Army Land Rover out to "Moondyne" to see how Mr. Spark's property was and found Mr. and Mrs. Sparks and a man burning a break around their property.

We sent a message back to headquarters (Beale's shed) by two-way radio to send up 10 men from the Army and be prepared to stay the night. We then returned to headquarters.

We then went over the hill behind my place and into the bush for about 2½ miles to where the fire was burning on the eastern side to see if water could be taken there.

We found we could do nothing on that front and turned to come home and after going about half-a-mile we found that Sparks side of the fire, which was about 2½ miles away from where we were, with a strong wind and willies that were blowing, the fire was jumping at about half-a-mile at a time and we were completely surrounded.

We had to return through the flames and about a mile and a-half of country through which the fire had just passed to reach Plunketts Road.

On arriving back at headquarters we sent one party of men to burn from Plunketts Road back towards Les Smith's property in a southerly direction. N. Fox and L. Smith were in charge. This was to burn back against the fire and so try to stop it coming into the valley.

I went with a gang of men from my place to Plunketts Road. P. Bird and Len Beales -- these are fire officers -- went with a party to join up at Craig's as the fire was coming into all the hills at such a terrific force and we had to burn back to try and save the properties. We finished up in the early hours of the 3rd January and after getting the fire under control we just kept up a patrol of the area.

Another gang on the evening of the 3rd burnt back along the top of properties belonging to Beale's, Bantock and Read to make the fire safe all along that area. The fire was still burning on the other side of the river, but out of our area.

I myself sustained damage to 2½ miles of fencing, about 50 orange trees scorched and 40 acres of grazing.

I have read this statement which is true and correct.

A.M. PICKETT,

I estimated the total damage at 25,000 acres burnt. That is only my estimate. There were 1,200 acres of citrus trees scorched and burnt and 1,000 acres of pasture. A considerable amount of fencing was also burnt.

That is the total amount of damage you have estimated?---Yes, but only roughly.

Can you tell me the number of locations you own in that district?---A part of 1352 and part of 1351.

You are a fire control officer?---Yes.

Are you also a bush-fire brigade member?---Yes, I am a captain.

How long have you been a fire control officer?---Thirteen years.

And how long have you been a fire brigade member?---I cannot remember but when the first Swan Road Board brigade was formed.

Would it be as long ago as 10 years?---No, not as much as that.

But you have been a fire control officer for longer than that?---Yes, for 40 or more years. I have been fighting bush fires.

How many members in your fire brigade?---We have not many members. We have about 10, really. The residents all join in. They will not sign up, but they will turn up to the fires. It is one of the best districts in which to get men to turn up to fires.

What equipment has the brigade?---We have only knapsacks and the board has one vehicle for which we can ring up and get. It has a four-wheel drive.

With a power pump on it?---Yes. We connect up with the Chittering area where there is a jeep and we all put in to buy a pump to put on it. Also, there are orchard pumps, but they are useless in the hills.

They have tractors, do they?---We have a Ferguson tractor which is owned by Sharpe. The country is

very hilly and there is a lot of it that we cannot put breaks through. You can hardly walk through some of the country; that is, along the hills. Do you mind if I speak about the army land?

No, if you let me ask some questions you can save that until last. I am trying to follow up certain points?---Very well.

What type of pump was on the Ferguson tractor?---Just a small pump and we had a 40-gallon drum on the tractor which can carry it down the steep hills.

The jeep has a certain type of pump on it?---Yes.

You know what sort it is?---No.

What are the best burning periods in your district? When can you do your spring burning there?---From the 15th December to the 15th March is the prohibited burning season.

When do you have to get permits before the 15th December? What period is there for burning?---From the end of May to the 15th December. That is when you can get permits to burn. No permits are issued after the 15th December.

Are you satisfied that those periods, as far as your district is concerned, are all right?---Yes, sometimes they can be altered because the road board has the power to do so, but I am satisfied with them myself and I think the majority would be.

Does the road board ever extend the burning period into the prohibited season?---I am not sure.

They did not do it this year?---No.

Do you know if the board just decides, through its board members, to extend the season when it does do so?---Yes, it does, but it generally gets the opinion of a few of the fire control officers. They generally contact me.

You have not got a particular advisory committee to help them in those matters?---No, they always know which one to contact and so forth.

Had you any permits to burn up to the 15th December?---I did not issue any. We have fire officers in the different sections and they are supposed to notify me so that we do not get too many permits issued on the same day.

You are the chief fire control officer?---Yes.

You have another man who is classed as a chief fire control officer?---Paul Bird was nominated as the chief fire control officer at the same time as I was.

You are the two senior men?---Yes.

What about the secretary of the road board? He does not act as the fire control officer in any way?---No.

I do not suppose your bush fire brigade carries out any practices, does it?---No.

Have you a map of the area we are talking about with you?---Yes, I have a map of the district here.

I may not want it for a moment, but you can keep it handy. Do you know what was the cause of this fire?---I am not in a position to say what exactly caused it. It is really not in my area, but I always help up there. I have a couple of ideas, but I could not definitely say what was the cause. I know roughly where it did start.

Where do you say it started, roughly?---Up near Grey's property, but I could not say where.

Do you think anybody up there could tell us?---I doubt it. Len Beale might be able to tell you. He was up there the day before I was.

Do you think they would have any diffidence about telling us?---They would tell you if they were sure, but I do not think they are sure; they might be. You can get in touch with them.

You speak of this telephone call you received from the P.M.G. Department. Can you tell me if your brigade or your road board have an arrangement with the P.M.G. to get certain priority?---Yes, he notifies the fire control officer first and then everybody in the district.

You mean the postmaster?---Yes, Jack Pearce. During this last fire they were called out one night for about an hour and we should not have been and I believe one of the officers told him that he must not ring unless one of the officers told him to.

He is quite harmonious in every way?---Yes, he works in well with us.

Speaking on this, you say in your statement, "I went with one party starting from Mr. Bush's and, working north finished up at 2.a.m." What do you mean when you say you were working with bushes? What were you doing?---The other party went up in the jeep to the other end and we all put the fire out.

How? With water?---With knapsacks and bushes.

You finished up about 2 a.m. Did you all go home, then, or did someone stay to patrol the fire?---A couple of them stayed to patrol the fire. It never broke out on that side.

And that was the end of the fire?---On that side where we put it out.

What about the other sides of the fire?---It was still burning on the military land. It is about seven years since this country was burnt. Over the last 30 years you always get a fire through there about every five or six years. That country will not burn for about two or three years; that is, before a fire can get through.

I am wondering why you left the other side without attending to it?---It could not be put out. You would be working for nothing. There is too much timber and stuff there. If you put it out it would start up again. You generally do the area around the top of the orchard and that is where that break would come into it.

I am thinking of the Army taking a hand in putting out the fire; if they had a large number of men would they not be able to put it out?---They might.

What was the weather like?---It was gusty. It was not too bad, but sometimes we got a willy-willy and there had been a lot of timber cut down.

You mean cutting saw mill logs?---Yes.

Do they carry much in the way of good timber?---Not like that down south, but a lot of timber has been taken off.

All for mill logs?---A lot has been taken off for fruit cases but mostly for mill logs.

It is pretty steep country?---Not on the top, but around the edges -- around the Chittering Valley and the Avon River it is steep.

This second fire on the 22nd December would be part of the same fire you worked on on the 16th December?---Yes.

Do you know the names of those two Forestry officers who went there?---No.

Did they agree to ring up the military?---Yes.

Do you know if they did?---I do not know for sure. I do not know who notified the military.

You say you were called out on the 24th December and fought the fire in Bush's and Yozzi's properties. Was that the same?---Yes.

You got the fire under control about 7 p.m. and you called again at midnight. You left men on patrol. Did it break out again somewhere?---That is the occasion on which they called us out when they should not have done so.

Who were the fire officers that met on the 25th of December?---There was myself, Jock Sharpe, Ken O'Neil and one other whom I cannot remember at the moment.

You say it was decided to roster the men to watch the area around Bush's and Yozzi's properties and a fire officer was left in charge of each shift. Did they stay till the 26th of December till it was safe?---No. It was not going out towards Yozzi's but towards the military.

Where was this coming out?---Towards the Avon river, but they were patrolling the area in which it got away.

You say you told Jim Read that you were going to the telephone exchange to ring up and ask the exchange to ring everybody in the district and tell them to report at Craig's gate at 4.30 p.m. that afternoon and to stand by if called upon. You say that he advised you that 20 people were left in the district and that he gave you their names. Does that mean that a lot of people normally resident in the district were out at the time?---Yes, some were out.

When he said "20 people" he meant 20 people fit to fight a fire?---Yes.

So he was not commenting on the fact that a lot of people had gone from the district?---You see the elderly people cannot walk over the hills.

You say you were leaving the exchange when you saw Ralph Harding go by and then you went on to Bantock's and asked the exchange to call the men and the R.A.A.F. up?---That was on the way back.

You say there were only 10 men from the R.A.A.F. who attended. What did they do?---They were on holidays and they attended. We notify them and they come out and help us.

What did they do?---They brought knapsacks and different fire beaters out.

They have a supply of knapsacks and fire beaters?---Yes.

What about the military -- do they have a supply?---That is the only time we had the military there; we have never had them there before.

Both the military and the R.A.A.F. had knapsacks?---Yes.

When the Military personnel came they had water tanks, but the tanks were too big to get off the main road and up the hills.

Did they have power pumps?---They had a couple but we could not get them off the main roads through the orchards.

If you had a call to fight a fire in the rough country would they answer a call to go out?---I am not familiar with the Military, but the Air Force will always stand by us and they have good equipment. We can only use this equipment on the roads, but not in the hills.

You say you asked the exchange to put a call out to the A.B.C. broadcasting station for all men to return to their properties?---Yes, some people in the Bullsbrook area have not got automatic telephone lines and it is hard to get in touch with the men.

Did the A.B.C. put the call through for you?---Yes, there was a good roll-up from everywhere, and the first time when there was such a big roll-up.

Do you think it wise for people to go away from a district like that in the middle of summer?---There are men in this district working 10 to 12 hours a day. That is the only time they can get a break. They are entitled to some holidays.

Do you think it wise for them to leave their assets at such dangerous times of the year?---They have to take the risk. I do not leave my assets, but I think they are entitled to their holidays. There is always the Air Force to call on.

You do not make arrangements for a certain number to remain in the district, and it is a matter of chance whether somebody is available there?---There is always someone on the property with the men working on it. The people do not leave their properties without anyone being on them.

You say you got the fire under control. Do you mean you stopped it at the fencing and it was still burning vigorously on the logs inside?---Generally we put out a fire a certain distance in. At some places it is

hard to get the water in, and you have to leave a man to watch the fire for a certain time.

You say that on the 1st January, about 20 men went up to the military section of the fire again to see it and put it out on the north side up as far as Yozzi's and on the west side behind Craig's; and that the fire was still burning on Military land?---Yes. They went to check if the fire was burning still, and to put it out if it was.

You say you got back about 2 a.m. on the 2nd January to the road and two Army men came along to inspect as they bringing up about 50 men on the 2nd at 6 a.m. to inspect and patrol the fire?---We went up to put the fire out in that section at 6 a.m. It was still burning.

The fire was still burning on the Military section?---Yes.

Again, it was difficult to get at?---That is so.

About 6 a.m. on the 2nd you went up to inspect and patrol the fire. Was it necessary to do anything else?---No. You cannot do much in the rough country out there. In the past we have put out fires in that country, but they broke out again. We do not put them out until they are in the clear so that they can be handled.

That is what you mean when you say about 50 local men turned up on the 2nd January but could do nothing as the fire was still burning on military property, until it came to more suitable country to fight it?---Yes.

It seems you are taking a risk in bad weather, but you say it is too exhausting to work in that country?---Yes. At other times we have tried to put fires out and the men got fed up when the fire broke away again. They complained that they had to work for nothing. If they had to fight the fire in that country they would not be willing to fight fires in the paddock.

You said you went with Lieutenant Jeffreys in the Army land rover out to "Moondyne" to see how Mr. Spark's property was, and found him and Mrs. Sparks and a man burning a break around their property. Were they burning that break; if so, was there something to burn back from?---The fire was going towards them. They had a good bulldozed track around their property outside of their break, to stop the fire going in in force and jumping the break.

Further, you say --

> We found we could do nothing on that front and turned to come home and after going about half a mile we found that Sparks' side of the fire, which was about 2½ miles away from where we were, with a strong wind and willies that were blowing the fire, was jumping at about half a mile at a time and we were completely surrounded.

That was not the fire Sparks lit as a back burn?---No, but where the other came in on the edge of it. It was shooting through till the brow of the hill and stopped.

What was the weather like at this time on the 2nd January?--Very hot and windy.

You say that you went with a gang of men from your place to Plunketts Road and other officers went with a party to join up at Craig's. You had to burn back to try and save the properties because the fire was coming into all the hills at such a terrific force. What did you burn back from?---From the top of the orchards.

Were the orchards burnt at that time or were they well cultivated?---The orchards were cultivated, but the trees in the last row got scorched.

Finally, you say that another gang on the evening of the 3rd burnt back along the top of properties belonging to Beale, Bantock and Read to make the fire safe all along that area; and that the fire was still burning on the other side of the river, but out of your area?---It was well out towards Toodyay. We knew they would look after it. They were on the top side. I presumed they were working around. We had enough to look after ourselves.

What co-operation was there between you and Toodyay?---Not much.

Each of you looked after your own?---Yes, except Chittering. We always co-operate with them.

I was referring to Toodyay?---The top end of Chittering might co-operate with Toodyay. The Military has a big section between us and Toodyay with no settlement on it.

Have you any ideas as to whether the restrictive burning periods in your district should be changed from what they normally are?---I do not think so.

Are you satisfied with them?---Yes.

Do you know the Bush Fires Act reasonably well?---Average.

Have you any suggestions as to whether the Bush Fires Act should be amended in any way, or whether the conditions should be amended or other conditions included to make it operate better?---I do not think so.

I would like to say a couple of things in regard to the Army.

You may later. You have not any suggestions for the protection of life and property, which is one of the terms of reference of this Commission?---I believe the Forestry have a few jeeps.

Which forestry are you think of -- Mundaring?---No, Nangarra.

The coastal plantation?---Yes. It is not far across there. I believe they have half-a-dozen jeeps. I am only told that. I do not know whether that is correct or not. I think it would be a good idea in the case of big fires if we could call on them straight away, not for equipment but for a couple of jeeps. These could be easily run back if they are not wanted as it is not far across. It would be a good help if something could be done about that.

If it is practicable to achieve any means of co-operation could you return the compliment by going down to assist them at any time?---Yes. We could if necessary. I have been across there from our place and it is out of my area.

You could help them with manpower rather than with equipment? You have not much equipment to take there?---No.

As far as you know has your road board or brigade tried to make an arrangement of that nature with the Forestry Department?---Not that I know of. I did hear that they cannot take them away from their property, but I was wondering if something could be done along those lines.

I do not think there would be any objections to taking them away off forest land if it were safe for this to be done. Their first responsibility, of course, is their land?---We understand that.

If that went too far a fire could break out and do considerable damage before they got back. Therefore, a certain amount of restraint must be exercised. You can only find out by approaching them and asking how far they will go in a spirit of co-operation?---Yes.

MR. R.K. SMITH: The board has made an approach and they are not allowed to take their machines off.

THE COMMISSIONER: The local officers are not allowed to. There is nothing in the law to stop them.

MR. SMITH: I am given to understand it is forestry law for them to remain at the Forests Department for their protection.

BY THE COMMISSIONER: I think you wanted to say something about the Army area, did not you not?---Yes, in regard to what Mr. Smith put up about a break. They would not be able to put a break around the boundary, but they could run it on the top of the hills.

Within their own land?---Yes. If they did that and if they made arrangements with all the boards that they would burn every three years, everybody could burn through that break and it would make that area very safe. A fire after three years is likely to go through, but if one organisation burned right through that area it would make it fairly safe. It could be done without any damage with that break. If they had that break there and a fire came through we would have something to go and fight against. Not only that, if the fire started in the valley in one of the settlements and we had sections we could stop the fire in sections instead of it going through the valley.

A.M. PICKETT,
16/5/61.

That is the big fire hazard, that military section right around and if that was cut we could cut the valleys in sections.

You appreciate that that fire break alone would not be an adequate fire stopper?---No, not on its own. Twice I have seen a fire jump over that valley. I cannot say for sure that it jumped over this time but I know I did see a fire jump over in my place over a mile. About 20 years ago we were watching a fire and all of a sudden a willy-willy took it on a hot day like that. We saw the ashes. We started to run but the fire lobbed there before us. Because of that time, I know it will go over that far. I am only going on what I saw that time.

Do you know if on those days the fire was burning, the fire weather hazard forecast was dangerous?---I do not know for sure because I was not listening to the wireless. Most of the season it was through there, though.

Mr. McArthur would like you to indicate on the map some of the places you have been mentioning so that we can get them down in "Hansard" as a record?---Very well.

BY MR. McARTHUR: Where did the fire start?---I do not know the location number of Grey's property, but it started somewhere in that vicinity.

Where is Spark's property?---About Location 579 or 580.

Where is Plunkett's road?---It is a road running through M.866 - owned by a Mr. Martin - and continues on into Reserve 1352 to an old mill site, and then carries on to Spark's property.

MR. McARTHUR: The jump which Mr. Pickett referred to was from the north-eastern corner of Location 1, which is owned by Craig, across the Brockman River to approximately the figure 3 in the "30" on Location 4. The properties referred to as Beale's, Bantock's, and Read's are M895, Location 5, and a group which may comprise Locations 6, 7 and 8. The map which as been referred to is 2880.

THE COMMISSIONER: That will be Exhibit A1.

BY THE COMMISSIONER: Is that all you wish to put before the Commission?---Yes, I think that is all.

THE COMMISSIONER: Thank you very much for coming along.

(The witness retired.)

THE COMMISSION ADJOURNED.

WEDNESDAY, the 17th May, 1961

HAROLD ERNEST STRAKER,
Bush Fire Warden,
10 Mossop Street,
Bunbury, sworn and examined:

BY THE COMMISSIONER: You are representing the Bush Fires Board?---Yes.

You have prepared some evidence for the Commission and I would like you to read it, please?---For which district?

Denmark?---It is as follows:-

WARDEN STRAKER:
Sunday 5th March to Monday 6th March 1961:

Following telephonic conversation with Bush Fires Board Secretary, proceeded to Forests Department, Shannon River, and contacted District Forest Officer Barney White at approximately 11.45 p.m. Was informed that Shannon River had been and still was occupied with Northcliffe and Pemberton fires, leaving Walpole Forests Department to handle Denmark fires on their own. Communications were only by telephone in Denmark district, although Forest Officer Rate, Walpole, was in wireless touch with Shannon River. Rang Bush Fires Board Secretary at 12 m.n. and 12.30 a.m. Mr. White informed me that Forest Officer Rate had another fire, started that day, on his hands and his team were out with bulldozers to contain same. Proceeded to Peaceful Bay Road and contacted Forest Officer Rate. As soon as Rate's instructions to his team were put to effect, Rate and myself proceeded to make a complete inspection of fire area in Kentdale-Scotsdale district.

We then called on Road Board Secretary, Mr. Timothy, at 5.25 a.m. (6th March). Long discussion, agreed communications were poor and wireless would be beneficial. Rang Bush Fires Board Secretary re wireless and asked for the services of Senior Warden per Road Board Secretary's request. Called on Constable N. Marshall, and all four (Rate, Timothy, Marshall and self) carried out further inspection and made plans for containing the two fires in Kentdale-Scotsdale area, which were in almost inaccessible regions between these two roads, and each day threatened small farming properties. Lack of organised control caused considerable inconvenience during the day with many breakaways, and it was decided to organise a back-burning programme as soon as communications arrived. Senior Warden Hale arrived at approximately 8 p.m. The position was fully explained and plans laid.

WARDENS HALE AND STRAKER:
Tuesday 7th:

Inspections of fire area with Road Board Secretary Timothy. Wireless communcations not satisfactory, as Walkie-Talkie not functioning effectively. Rang "PYE" and arranged for another set which arrived by 'plane same evening. Arranged for use of grader and bulldozer to make fire lanes. Very windy, so from safety angle, and through limited fire fighters and equipment, back-burning postponed until 6 p.m. This continued until approximately 11 p.m.

when damp conditions caused a halt.

Wednesday 8th:

Rain commenced at approximately 7 a.m. - just spasmodic. Senior Warden Hale erected wireless, whilst Road Board Secretary and Warden Straker carried out further perimeter inspection. Considered no further action was warranted as far as control of fire area was concerned, as damp conditions seemed settled. During afternoon, Senior Warden Hale, Constable Marshall, Road Board Secretary and myself called on a number of settlers re their fires. Late afternoon a conference was held at road board office with Forests Officer Rate, Road Board Secretary, and ourselves (see "Recommendations").

Thursday 9th:

Constable Marshall, Road Board Secretary and Warden Straker called on Messrs. Thorn, Collins and Bunny re fires on Hunt's Canning Factory. Parkin had made verbal request for permission to burn three heaps of timber in the swamp section some two days before, doing same approximately one quarter of a mile between the first and third heaps. There were three men in attendance - two were working with dozer at third heap and one at the first heap when the wind took the fire into timbered area on, I understand, the 1st March, 1961. Whilst on this property, I told Parkin that as the 'dozer he was using was not equipped with a spark arrester or knapsack spray, he was liable under the Bush Fires Act and it was not to be used. The Road Board Secretary took details, as Parkin would not make a statement. As Mr. Hunt was in Perth, Constable Marshall stated he would contact his superior in Albany and ask for Hunt to be interviewed on his return and request that he (Marshall) be present because of his personal knowledge. Recommended to Road Board Secretary that Parkin appeared to have made three breaches of the Act, i.e. not notifying the road board, not giving four days' notice and not notifying neighbours, but suggested nothing be mentioned of not obtaining written permit.

General:

These major outbreaks occurred in districts at approximately the same time. One at the Kent River, another near Owingup Siding and the third near Whittakers Mill in the townsite. These will be dealt with in a report by the road board secretary.

Lack of organisation, knowledge of Bush Fires Act and communications caused considerable worry to the road board secretary and Forests Department.

There are thirteen brigades for the district, which is more than half unoccupied, and each brigade is too parochial.

The road board has not issued fire break notice this season, and in fact has never enforced fire breaks, thus making protective burning hazardous.

Too much land is held, evidently for investment purposes, and not cleared or cleaned up. Also between Kent River and Scotsdale there is approximately 10,000 acres of land unalienated and is almost "tiger" country.

Not enough protective burning has been carried out.

Recommendations:

(1) Brigades be re-organised and Fire Control Officer numbers reduced by allotting them larger areas.

(2) Firebreak notices be issued and rigorously enforced.

(3) Firebreaks be compulsory around (a) all cleared or part-cleared land 6 feet wide and (b) around farming boundaries of all uncleared lands 10 feet wide where such properties are occupied, and (c) half a chain wide around farm boundaries of all unoccupied properties, whether cleared or uncleared.

(4) Assistance, probably from Main Road grants, be considered for developing as fire lanes all declared roads in Kentdale-Scotsdale area, because of inaccessibility.

(5) All Fire Control Officers and Brigade Officers be informed that Fire Control Officers cannot delegate their power for permit issuing and only written permits are permissible.

(6) The Bush Fires Board provides suitable propaganda circular for issuing by the Road Board to all ratepayers.

(7) A district meeting be held as soon as possible.

BY THE COMMISSIONER: What is your experience in connection with bush fires control?---I came to this country 14 years ago. I was farming for approximately five years in the Augusta-Margaret River area, just south of Karridale. I had travelled right throughout the South-West considerably, and I have been with the Bush Fires Board for approximately four years -- just over four years.

Have you been associated with any major fires before this last season?---The Wagin fire.

Do you know what was the cause of this fire which you investigated at Denmark? Do you know where it arose and the cause of it?---It appeared -- I wouldn't say definitely - - -

Make it quite clear -- not hearsay evidence?---There were quite a number of fires that apparently got

away; but from the hearsay evidence, some of it had come from Hunt's Canning Factory.

When you went down there on March the 5th what was the weather like?---Very warm, Sir -- hot.

Can you be a little more definite? Have you any idea what the temperature was and the strength of the winds?---Temperatures around the 105; because I'd just come from the Gidgegannup fire on the Saturday prior to the Sunday, which was the 5th, and I heard the report on the wireless about the fire down there at Denmark; and I was quite concerned about it and consequently I rang the Bush Fires Board Secretary to see whether I should carry on down there.

When you say it was 105, was that the Perth temperature or the temperature down at Denmark?---That was the Perth temperature.

You don't know what the fire hazard forecast was for that day?---No.

You say that you made plans for containing the two fires in the Kentdale-Scotsdale area. Is that right -- Kentdale-Scotsdale?---Yes.

Further down in your statement you refer to the Kent River, Scotsdale; is that the same?---Yes.

You say: "Which were in almost inaccessible regions between those two roads." What do you mean by inaccessible: so steep you couldn't take a vehicle on it; or so scrubby you couldn't get through it?---So dense, and swamp.

Why did you ask them to send Senior Warden Hale down?---The reason was there was nobody down there who had any knowledge of using wireless, and I thought it would be advisable to have somebody with wireless experience.

Can you use the wireless?---I have used the wireless, yes; but it meant one going out with the wireless and somebody else having no knowledge of it.

You wanted Senior Warden Hale at the base?---Yes.

What was the position with regard to the fires when you arrived there; can you describe them shortly?---When I got to Peaceful Bay Road I saw Fire Officer Rate. He informed me there were quite a number of fires he was concerned about. There appeared to be -- when we made an inspection it appeared to be in between the two roads -- the Scotsdale and the Kentdale; but there were logs burning on numerous properties, and there were quite a number of logs almost along a four mile stretch, if I remember correctly, facing or abutting the main road which adjoins Hunt's Canning Factory's farming property on both sides of the road.

Had any change taken place in the condition when Mr. Hale arrived?---No.

What action was being taken to deal with those fires at that time when you arrived there?---The time we arrived there, which was the early hours of the morning, we didn't see anybody at all.

There appeared to be nobody looking after them?---No one was there.

When did you first see anybody taking any action at those fires?---When we went around -- approximately, I'd say, about 7 or 8 o'clock.

In the morning?---Yes.

BY THE COMMISSIONER: Was that the morning of Sunday or Monday?---The morning of Monday.

What did you see then? Were there many people there?---No. I should say there were no more than 10 or a dozen.

What were they actually doing?---They were just hanging around and sort of nattering of what they were going to do and whether the fire was going to come out; and that it was really doing no harm.

They were not taking any action to see that the fire was safe?---No.

When did you first see them do that?---When we went around in the afternoon of Monday, they turned up. They had pumping equipment: One pump.

What sort of a pump?---It was mounted on a 30-cwt. Morris truck, I think.

With a tank?---With a 200-gallon tank; and then one other turned up a little later.

One other person or truck?---One other truck, equipped. I would not swear how it was mounted but I think it was on a trailer; but I would not swear to that. By that time, which would be getting on towards midday, there were probably about 15 men there.

I am left with the impression that nobody was very energetic about dealing with the fire?---No, they were quite apathetic because the general impression where the fire was was: It was not doing any harm, it is only scrub. That seemed to be the general attitude: It was scrub.

Do you find that a general attitude throughout the State -- that people are not concerned with putting a fire out so long as it is not threatening some particular property?---Broadly, in many parts, yes.

When it came to Tuesday, you say it was very windy. Have you any other information you can give about the condition of the weather? What was the forecast for the day, for instance, as far as fire hazard was

concerned?---I made no personal note of it. I would not like to say at this stage. But any action that would be taken would be with that in mind: Bearing in mind the forecast we would have obtained at that time.

Who is Mr. Thorn?---He is a brigade officer who lives almost opposite Hunt's canning factory farm.

Who is Mr. Collins? I am referring to where you say there was a meeting of Messrs. Thorn, Collins and Bunny?---He is the next-door neighbour to Thorn.

As far as you know, he is not a fire control officer?---No.

And Mr. Bunny?---He, I believe, is just a member of the brigade.

You do not know where he lives?---It is all within a vicinity of three or four miles.

You say the fire was on Hunt's Canning Factory. How big an area do you visualise?---That is a bit misleading. It is a farming property owned by Hunt's Canning Factory; it is not the site of the canning factory.

You say that Mr. Parkin had made verbal request for permission to burn three heaps of timber in the swamp section. The swamp section is a piece of swamp in that land belonging to Hunt's Canning Factory?---There is a depression there, yes.

You go on to say, "….doing same approximately one-quarter of a mile between the first and third heaps." I take it the second heap was in between?- Yes.

You say there were three men in attendance. Do you remember their names?---No. Parkin was one; one was a bulldozer driver, and one the tractor-driver there.

When did the restricted burning season open in that district? When was the end of the prohibited season, in short?---The 13th March.

This was lit before the restricted season started. It was lit during the prohibited season?---No; it was a week before. It opened earlier this year. It opened on the 27th February.

Do you know who actually lit these heaps? Was it Parkin himself?---Parkin said that he had lit them, but I would not take that as being literal.

Did he have a permit?---No. He had written permission. He had written for permission from Thorn, but did not obtain a permit. He had a verbal permit.

Did he have any firebreak around those heaps?---Yes; it was quite clear around there. It was more than a firebreak; it was cultivated.

When did you suggest to the road board secretary that nothing should be mentioned of Parkin not having a written permit?---I found from the general trend going through there that the procedure had been just to give verbal permission to quite a number. I thought it was a domestic matter that would be handled from the authority; a matter for the road board to take up with the various fire control officers, and as the secretary was new to the district, having been there only a few months, he would not be aware of the weakness that had existed.

Did you make it clear to the secretary of the road board that he should insist on permits being issued?---Definitely.

You realise that if a practice becomes general, it can be quoted in law as being condoned?---I explained that the road board were liable for aiding and abetting illegal fires. That is what it amounted to.

You say that the major outbreaks that occurred in the district at the same time would be dealt with in a report by the road board secretary. Is that a report to the Bush Fires Board?---Yes.

Have you received that report yet?---I could not answer that. I do not know whether our secretary has received it.

Would you make inquiries to see if it is available to the Commission?---Yes.

You say that lack of organisation, knowledge of Bush Fires Act, and communications caused considerable worry to the road board secretary and the Forests Department. What was the Forests Department particularly worried about?---The extreme western end of the road board comes within the jurisdiction of the Forests Department, from the Walpole end. They had been considerably concerned in the past about fires that had been lit in the area with disregard to the Bush Fires Act.

What communications were you thinking of -- telephonic communications with the rest of the district, for instance, or wireless communications, or what?---General notification to the neighbouring brigades and authorities -- local authorities as well as the Forests Department -- of fires lit without permits.

You mean it is not a practice for people down there to notify their neighbours when they are going to light a fire?---From the general impression I gained, quite a number think that is all right if it is a few logs, but they do notify if it is more than a few logs.

Do you know whether Parkin notified his neighbour that he was going to light these fires?---Only Thorn.

He was a fire control officer?---Yes.

He did not notify anybody else?---I understand not.

When you refer to lack of knowledge of the Bush Fires Act, are you suggesting the Forests Department and the Forestry officers in that district have a lack of that knowledge?---Not the department, but the fire control officers do not appreciate their requirements.

I can understand that. You say, "Lack of organisation, knowledge of Bush Fires Act and communications caused considerable worry to the road board secretary and Forests Department." Apparently, they were worried over the local control?---Yes.

You say, "There are 13 brigades for the district, which is more than half occupied, and each brigade is too parochial." You mean that they do not join in with each other?---There is no co-operation between the neighbouring districts.

You mean that there is no adequate planning should a fire break out?---No.

Have they an advisory committee to assist the road board in dealing with these sort of things?---No.

You say, "Too much land is held, evidently for investment purposes, and not cleared or cleaned up." Officially, -- not personally -- have you any objections to people holding land for investment purposes?---Not at all.

Do you think that as a result of people holding land for investment purposes, they do not look after their land, from a fire prevention point of view?---No, they do not.

You mean they are holding it in the hope that the value of the land might increase?---Yes.

If a man was holding land for the purpose of utilising the timber on it some day, would you say that he was holding it only for investment purposes?---If a man is holding it for something that will eventuate in the future, I consider that that is holding it for investment purposes; also, holding it for a son that is coming along and who is still at the teen-age stage.

I am interested in the attitude of people who are holding land for the value of the timber on it. You can appreciate that if a man is holding the land for the value of the timber he might not want to cut it all at once. He would therefore have to hold it for some time, would he not?---Yes.

You still think that there has been the practice with any area which they own?---Yes.

Can you indicate any land down there which you consider is being held for investment purposes?---From what I can gather from private sources, it is the area between Kentdale and Scotsdale.

That does not carry commercial timber?---No.

Is that land owned by one person?---I understand it is not; there are quite a few people who own it.

And do you know of any timber country which is held, but not adequately protected?---Not in that area.

Not in that Denmark district?---No.

What do you mean by "tiger country"?---When you get into it and you cannot see far ahead; it is really scrubby.

Your recommendations are that the fire brigades be re-organised and the fire control officers reduced by allotting them larger areas. Why do you want to do that? Why is it an advantage for a fire control officer to have a larger area instead of a smaller one?---They can delegate their power as fire control officers. One of the brigade officers can take over and have full control of the fire. However, my recommendation is more in regard to permit issuing for smaller fires. Some permits are for only two or three acres, and many of them are just for lot areas, and so he would have the picture, over a wide area, of the fires that were taking place.

How many fire contro1 officers are there in that district now?---13 or 14 approximately.

Did these recommendations, which you are making, result from a meeting that you had at the road board office?---Yes.

Why did you leave Mr. Marshall, the policeman, out? He went round with you and looked at things. Why did you not bring him into the discussion?---I have an idea that he had to go somewhere else on police work.

You suggest that "fire breaks be compulsory around (a) all cleared or part-cleared land 6 ft. wide and (b) around farming boundaries of all uncleared lands 10 ft. wide, where such properties are occupied, and (c) half-a-chain wide around farm boundaries of all unoccupied properties, whether cleared or uncleared." Why do you make any distinction between whether they are occupied or not? Do you think that half-a-chain wide around the farm boundaries is going to make any difference to a fire breakout?---No.

Then why do you say that?---By indicating all property for protective burning up to that road. It would increase the width of that break and half-a-chain would enable them to carry out protective burning with a lesser number of people.

Who is going to do the burning?---If the absentee owner could be made to do it under the Bush Fires Act, it would reduce the hazard.

And then you are suggesting that he would have less people to help him than if he were occupying the area. I do not quite see your logic there?---You have a break of half-a-chain and if you are burning into it a half-a-chain is better than 6 ft.

But why make the difference as to whether the property is occupied or not? It seems to me that in any case, you should have an adequate number of people to control a fire whatever the width of the break may be?---I agree, but one would be more regular than the other.

I do not see that that necessarily follows. If the road board has the right to require a person to establish a firebreak or burn a piece of country, the board could exercise that right as frequently as it wished?---Yes, it cou1d do so.

You say that a district meeting should be held as soon as possible. Do you know if that meeting has been held?---No notification has been received.

But you expect a notification to be received?---They are to notify us whether it is to be called.

You say that only written permits should be permissible. By that you mean that the permit should be issued only on an approved form?---Yes.

BY MR. MCARTHUR: Do you have any plans or maps of these Denmark fires, showing their location?---No.

When you were planning the backburn strategy, you did not have any plans?---I thought you meant now. We had the ordinary departmental lithograph map.

Whose map was it?---It belonged to the Forestry Department and the road board secretary. Actually the plan was more or less formulated by the road board secretary.

BY THE COMMISSIONER: You have not a copy of that plan in your office here in Perth?---Not of that particular plan, no.

BY MR. OATES: Would you agree that the condition in regard to the settlement of Denmark is a normal condition that pertains over the rest of the State? By that, I mean to say that the settlement of the district is broken up into pockets in undeveloped land which could lead to this parochialism that you mentioned?---Yes, that is why I mentioned in my report that the half the area is unsettled.

I was interested about the protective burning and the half chain break. I was wondering whether you could have meant that people carrying out protective burning in occupied holdings would be able to muster a large force whereas those in unoccupied holdings would probably have to do it with a less number of people. Did you have that in mind?---Yes, I also had at the back of my mind that the permit to burn if correctly made out will last for 28 days, and one could continue one's burning, so that if one occupied a property one would get sufficient notification, and after notifying one's neighbours one can carry on with the protective burning for three or four days according to weather conditions. But in the case of an absentee owner he has to go down to the property to carry out the burning and he does not have the necessary opportunity; consequently he has to burn with less people helping. I think you need the extra protection which a half chain break will give.

BY THE COMMISSIONER: You say that when you have a permit issued you have 28 days in which to exercise your right under that permit. Does not the permit state the day on which you must light the fire?---It says day or days.

It does not give a date?---Yes.

What I mean is that you can light the fire within 28 days of the date stipulated?---If you are lighting on a certain wind I think you can. The fire control officer may stipulate that you must light on an easterly or westerly wind.

I appreciate that. But if you are issued a permit to burn on the 1st of March do you mean you can burn on any day within 28 days of the 1st of March?---No, unless there is a qualifying stipulation as to lighting with the wind, if that wind does not eventuate on that day it is worded accordingly. It might say you can light on the 1st of March but it must be lit on the first south-westerly wind. But before you do light, if it is after the 1st of March you must notify your neighbours prior to your lighting.

I appreciate that, but I am trying to find out that supposing nothing is said about the winds - it just says you can light a fire on the first day of March, and you think you would prefer to wait for a while; can you burn on any day within the 28 days?---No, not if he stipulates it.

But if he stipulates the day and says you must light on the north-east wind you must wait for a north-east wind?---Provided you give notice.

It seems to me that there is a lack of uniformity. Before you read your other report on the Keysbrook fires which you presented to the secretary of the Bush Fires Board I think we might ask Mr. Wallace if he would like to submit the exhibit which he has for us. We can then carry on with your evidence?---Very well.

THE COMMISSIONER (To Mr. Wallace): Would you like to submit the exhibit you have, Mr. Wallace?---Yes. I desire to submit this plan in the Dwellingup area giving information regarding private property boundaries and the spread of the fire. It may be of value to your inquiry. It is not the plan that was submitted before.

EXHIBIT EXHIBIT A.2. Dwellingup Fires from 19th to 25th January, 1961.

Thank you very much, Mr. Wallace. You may leave now if you wish?---Thank you, sir.

BY THE COMMISSIONER (To Mr Straker): Would you now like to read the report on the Keysbrook fire which you submitted to the Secretary of the Bush Fires Board?---Very well, it is as follows:-

Sunday, 22nd January, 1961:

At approximately 5 p.m. the fire control officer for Keysbrook received a call from the forest officer. Inspection carried out, and decided at dusk to back burn from southern boundary of Skinner's location 600, two miles due east of Keysbrook. Fire approximately two miles south of this location in Murray district, and travelling north with south easterly winds.

Prior to this wind had been mainly westerly and personnel from Keysbrook had been assisting in Murray (North Dandalup) area. Teams moved to Rowleys approximately one mile south west of Skinner's southern boundary to fight face of fire, could not hold, transferred forces to Palmers Road (40 mile peg), round about homestead and started back burn to safeguard against south-east wind. This went on all through night until approximately 5 a.m. Monday.

Monday, 23rd January, 1961:

Early hours commenced to burn fire break from Palmers location 234 to 456 and 355 due north to Gobby's Road and South West Highway, North west corner of location 280. This was through at approximately 1 p.m. Intention to hold on this line. At same time another team commenced burning line from north west corner of location 600 (Skinner's) full length of Gobby's Road to North west corner of location 280 to complete face of fire break. These linked to time. Wind still south east. About noon, also commenced back burn from north east corner of location 600 due north to Junction of 36 Road and Clinton Road. Wind changed about 2 p.m. to due east. Held for two hours approximately. Wind now north west. Then took fire through swamps in northerly direction to south east corner of location 267. All other fronts mainly held. A number of jump areas put out.

I would point out that on Sunday and on the early hours of Monday morning that was the information I obtained from the fire control officer up to the time I arrived.

So when you say the warden arrived at Keysbrook you are referring to yourself?---Yes.

Then we can change that to "I arrived at Keysbrook"?---

Very well. To continue --

I arrived at Keysbrook, approximately 1.30 p.m. About 2 p.m. police mobile wireless car with four men and two walkie-talkies arrived. Deployed mobile at 36 Road and Clinton Road Junction, one walkie-talkie in Clinton Road and one down 36 Road. Reception from latter spasmodic - iron stone ridges. Called for and got second mobile approximately midnight.

Very useful. Wind changed to North-east, dangerous. Jumped over on east side of Clinton Road. All fire fighters withdrawn from hills and reformed at junction of 36 Road and South-West Highway. Called for Army personnel, with wireless and water support. Due to arrive 4.30 a.m. Tuesday 24.1.61. (Believe this was about 11 p.m. Monday which was about the time I made the call). All personnel had by this time been on fire face for 30 hours. Agreement to burn further break from Gobby's Road (No.3019), due north to location 488 (36 Road) and South-West Highway. Fire held on southern side of 36 Road due East to junction of Skinner's burn off down to location 1355, giving us an approximate fire front of 10 miles on south-east corner of district. Position critical.

Tuesday, 24th January 1961 - Approximately 2 a.m. Chief Fire Control Officer Ladhams instructed Road Board Secretary and Fire Control Officer at control point to get rest and regroup at 4 a.m., to contact Army at 34 mile peg to put through further back burn in sections of 2 miles (if necessary) on east of South-West Highway due north to Serpentine River.

Army arrived at 4.30 a.m. as arranged, but only 14 and not 100 men. These were signals unit: 8 operators, 3 drivers and 3 for fire fighters.

At approximately 5 a.m. fire jumped Highway - easterly gale blowing - to pasture land on location 250 and reached railway line. Immediately put out - approximately 20 acres burnt. Army used here did an excellent job (see summary). Governor arrived at approximately 5.30 a.m. Was asked how things were, said waiting urgently for balance of Army men to complete burn. Adj. got on to Swanbourne, Western Command. Appeared to have to wait until 6.30 a.m. parade for news. Contingent arrived Serpentine approximately 10 a.m. under Major Clark. Things started moving about 11.30 a.m. with Army patrols from 36 Road to Palmers Road. Major Clark set up base at 11 a.m., Keysbrook. Fire fighters were already covering 36 Road and carrying fire east. At 7 a.m. Chief Fire Control Officer carried out inspection of complete north-east section, approximately 3 miles above 34 mile peg. Considered fire could be contained at this sector. At 8.30 a.m. further force taken to northern section of location 737, 672 to 267, going north-east. Carried out control here, plus burning of two mile break. Total frontage of fire in this area about 15 to 20 miles from Highway, at 36 Road, along total length of 36 Road, connection road from 36 to 34 and top section of 34 to river, was continually patrolled until 8 p.m., when further inspection was made with Chief Fire Control Officer and all forces returned to base. Total line patrolled at this stage had increased to estimated minimum of 40 miles. During Tuesday, Fawcett's location 755 and Skinner's location 600 became seriously endangered. Complete family of Skinner's moved to Fawcett's. Team and Army personnel sent to Skinner's and Fawcett's and saved both houses. Excellent job, as houses were encircled.

Wednesday, 25th January 1961 - Fire in Forest area, east boundary of Location 436, under prevailing

conditions was cause of considerable concern, as weather forecast was north-east and this could cause fire to jump Serpentine River into cleared country and would bring it around the rear of existing front. If this did happen it was pre-arranged to withdraw all forces to the highway and burn further break back from the 36 Road north to Serpentine River. South-east wind would have taken the fire to Mundijong.

Patrols and mopping up all day. Rain started patchy in afternoon. Inspection made with Chief Fire Control Officer at 8 p.m. and all forces withdrawn.

Thursday, 26th January 1961 - Inspection made with Chief Fire Control Officer Ladhams, Road Board Secretary Glennie and Fire Control Officer Fletcher of whole area at 9 a.m. General light rain during night and morning.

At this stage it is not possible to give a true picture of pasture losses, but would estimate it being in the region of 500 acres. Skinner has lost all his pasture, aggregating about 200 acres.

Stock losses (may be an odd sheep). Fences - considerable.

Summary:

1. If Army and other personnel had not held jump over at highway, with the cyclonic easterly gale blowing, this fire would have swept to coast on flat pasture land.
2. Local control and organisation was good.
3. Plan for back-burning well controlled and executed. There is no doubt that this procedure was carried out with considerable foresight, was responsible for saving many dwellings, and preventing spread to heavy pasture areas. If this had occurred, a very dangerous situation would have arisen by fire getting around to north-west of Murray district - heavy pasture, flat country.
4. Communications, once established by Army, was excellent and saved considerable time and manpower wastage. Chief Fire Control Officer G. Ladhams covered 700 miles in his vehicle covering fire, in three days and nights.
5. Compulsion of firebreaks yearly helped this district considerably and proves need for pressure to be put on districts who have been lax in the past and under a false sense of security.

Recommendations:

Road board to call meeting of officers engaged on fire, immediately following next road board meeting.

Further, a day meeting to be convened by Bush Fires Board, to be held in Perth, inviting attendants of two representatives from Serpentine-Jarrahdale, Murray, and Drakesbrook Road Boards, Forestry Department and zone Bush Fires Board representatives, Messrs. Purse and Knight of Bush Fires Board. Men I consider who should be invited are:-

| | |
|---|---|
| Serpentine-Jarrahdale: | Chief Fire Control Officer G.Ladhams and Fire Control Officer N. Fletcher. |
| Murray: | Chairman of Advisory Committee, J. Paterson and Fire Control Officer, R. Salter, Meelon. |
| Drakesbrook: | Road Board Chairman, N.McNeill, and Chief Fire Control Officer, J. Butcher. |

(Note: I consider this necessary, as many will, or do not appreciate that control and action of Serpentine-Jarrahdale men at Keysbrook prevented a catastrophe far beyond one's comprehension. Also an overall picture is essential, particularly as criticism has been made of apparent forestry refusal to burn or allow protective burning in various sectors).

As this concerns more than one district, I consider this initiative must be exercised by the Bush Fires Board to convene the meeting and not leave it to an individual district to do so.

General Remarks:

Need for Bush Fires Board to have and control a wireless network is absolutely essential. If this had been available at beginning, considerable time and labour could have been saved. Police network is, in my opinion, poor, and walkie-talkies do not give sufficient range. Telephone communications is and should be only secondary. Great difficulty experienced in getting weather reports, etc. Eventually found it better to ring office and get everything through there, including parts for fire truck.

In my opinion the minimum needs are: -

1. Base at Perth, with 5 channels - Forestry, Army and Police included.
2. M.T. 20's fitted to wardens' vehicles.
3. Road boards to have a minimum of 1 set (M.T. 20 with 5 channels).

This would enable an immediate S.O.S. call for assistance to Perth, when organisation could be put into full swing if needed, after the initial telephonic alert.

BY THE COMMISSIONER: How did you come to be present at this fire?---I was sent down from Perth.

DRY/SF

H.E. STRAKER,
17/5/61.

The Secretary of the Board sent you down?---Yes.

You say that at approximately 5.p.m. the fire control officer at Keysbrook received a call from the forestry officer. Who was the forestry officer?---I do not know.

Do you know the nature of the call and what was said?---I was only informed - and this is hearsay - that there was a fire somewhere in the region of where they were sent. They were not quite sure where it was in the Murray or Serpentine-Jarrahdale area.

You mean the fire got out of the forestry area on to private land?---That is what I understand. It is only hearsay.

You said in the third paragraph of the first page of your evidence that you called for and got a mobile transmitting car. Do you remember when you called for that mobile car -- what time it was?---I do not know exactly now, but I know they got there before I expected them to.

So you did not call for them before 6 o'clock?---No.

Can you get closer than that? Was it before 8 o'clock or 9 o'clock?---I would not like to say.

You say the Army arrived at 4.30 a.m. with only 14 and not 100 men. These were Signals units -- eight operators, three drivers, and three fire fighters. You mean that three out of that 14 were available to fight fires?---That is correct.

Then the Governor arrived and the adjutant got on to Swanbourne, Western Command. What is Swanbourne?---That is headquarters.

Further down you say that the total frontage of the fire in this area was about 15 to 20 miles from highway at 36 Road along the total length of 36 Road, and the connection road from 36 to 34 and the top section of 34 to river was continually patrolled until 8 p.m. when further inspection was made with C.F.C.O and all forces returned to base. Does that mean you withdrew all people from the front of the fire?---From Clinton Road and 36 Road.

All people on Clinton Road and 36 Road returned back to where?---Back to base.

Where was base?---That was at Keysbrook.

Why did you do that?---They sent another squad out. All those who had actually been on the fire face had been working for quite a considerable number of hours and it was a matter of drawing them back to give them rest.

They were replaced by other men?---Yes.

You say that the complete family of Skinners were removed to Fawcett's. Was that all the evacuation that took place? You did not move Fawcetts out?---No. We had information that Skinners had gone up to

Fawcetts further east.

Was there any difficulty in moving the one family to another place? Did they raise any objection?---They evacuated themselves.

You say that both houses were saved. How were they saved? Was it due to any actual operation by the fire fighters?---I was given to understand it was the operation of the Army that actually saved them.

Do you know what they did?---They beat out the flames. The walls of one of the sheds on Fawcett's property are made of blackboy and that caught alight. In this shed was, I understand, stored petrol, kerosene, and detonators. The Army put that out.

Do you know how? Was it by playing water on it? Did they pull it down or what did they do?---By water. Actually they were sent there to evacuate the Fawcetts from Fawcett's property. I understand the Army could not get out and they had to fight the fire there. Fortunately they saved them.

You say that at approximately 5 a.m. the fire jumped the highway -- easterly gale blowing -- to pasture land on Location 250 and reached the railway line, and was immediately put out. Who put that out?---The Army and one or two locals.

With what means -- knapsack sprays?---Mainly knapsack sprays, but they also brought down water tenders and local men assisted as well.

Did these water tenders have power pumps on them?---Yes.

You refer on page 3 of this report to criticism made of the apparent Forestry refusal to burn or allow protective burning in various sectors. I appreciate you are not quite aware of the facts, but will you tell me what you know or what you have heard about the Forestry Department refusing to allow people to burn, or to allow protective burning?---At the fire quite a few said that Forestry would not let them burn there or let them burn

here, yet the Forestry did nothing to protect them up this end -- they were more interested elsewhere. I took it to be just a grouse, but I thought it was just as well to mention the fact.

Do you know of any specific cases yourself where the Forestry Department refused to allow people to burn?---No.

You mention the need for the Bush Fires Board to have and control a wireless network is absolutely essential. What do you mean by network? Do you mean one base station and half a dozen sets working on that base; or do you mean a network based in Perth going over the whole country?---I think a network based in Perth going over the whole country.

You say the Police network is, in your opinion, poor. Could you dilate on that a little? What do you mean by being poor?---The Police network is poor because in many instances we have to travel in a truck or in our car because we could not get through. The sets are not powerful enough -- the mobile sets in the Police car.

Then your main criticism is that for bush fire purposes they are not powerful enough?---Yes.

So you suggest that the Bush Fires Board have its own network, and I think you said five channels, including the Forestry, Army and Police. That means you would have a channel on the Police network and any information they gave could be picked up by your stations elsewhere?---In the event of a fire emergency when the Police co-ordinated in that fire control, they would use the mutual channel.

You still would allow any of your operators with a set to pick up any Police messages at any time of the year?---No.

Why?---I did not mean that.

But if you do that, that would be the position? They could pick up a message?---In a number of the sets there would be five channels, but you would have a crystal out. If any authority was to take over the vehicle

containing that set he could insert the crystal into that channel, which would give him linkage. If the vehicle was taken over by the Commissioner of Police, the Conservator of Forests, or the Secretary of the Bush Fires Board in a given area, they could put in a crystal.

Why have a separate channel? Why not use the same frequency as the Police use?---At times you would confuse with ordinary routine.

It would, if you put in a crystal to listen?---

?---No. You would only be utilising that channel in an emergency. You would not be using it all the time.

Only when an emergency arose?---That is right. In other words, it would be a silent channel until the occasion warranted its being opened.

I am wondering why you need a second line. Why not use the forestry frequency, for instance?---They use their wireless for routine matters as well and you would be breaking in on other districts with the routine.

But only when there is a fire on and there is an emergency. They would be as anxious as you were to know what orders had been given?---They use their wireless sets in times other than when there is a fire.

But you would not be?---No, but when we did we would be interfering with their own work.

I am not very convinced. I feel that every fire officer could have his own network and frequency?---No. What I envisaged was one to link in with the forestry network for locals. In other words, if there was a major fire in, say, the Harvey area, if three or four vehicles were equipped they could join in and assist the forestry.

Does the forestry have the same frequency throughout the State?---I could not answer that one.

If they did have different frequencies in different places you would have to have another channel to cover the extra frequency?---I imagine that they would have the same frequency.

What do you mean by "MT20X to be fitted to wardens' vehicles?"?---That is a new set that is out that I have had occasion to use. It is quite a powerful set.

It is a particular brand?---Yes.

There may be other brands equally as good?---Yes. I think I said "such as".

No; you said you wanted one?---No, it is just the powerfulness of the set.

Is your suggestion that you should have these sets based in Perth and when there is a fire you take them to the fire, or would you have them established in the various road board offices?---My opinion is that the wardens' vehicles should be equipped and the road boards should have one set so they can have a certain amount of experiment and practice with it. Immediately other sets are brought into the district they could be linked up with this set and any spares would be kept on a regional basis.

So when you say that this would enable an immediate SOS call for assistance to Perth would you think of the road board having one to connect with Perth?---No, it is not that at all. I mean that they ring Perth in the event of a major fire or what they suspect will be a major fire, and then sets could be brought in. But they already would have one set so that as other sets were brought in they could immediately get in touch with the control authority which would be the local road board or suchlike .

As far as this district of Keysbrook is concerned and round there generally, do you think the restricted burning periods as they stand this year are satisfactory?---Yes.

They do not open too soon?---No.

Do they do much burning in that district in the autumn at this time of the year?---I have only in the last six months taken over the Keysbrook area so I do not know.

Do you yourself have any preference for Spring or Autumn burning, one against the other?---I have a greater preference for a Spring burning over an Autumn burning.

Why is that?---Mainly because you can do it when conditions more or less prevent a running fire. You have a longer period in which you can carry out protective burning.

Also, purely from the protective angle, we are not going to cause much tree damage then.

When you say you have a longer period, do you mean the period allowed is longer in the Spring?---You can burn in many parts---varying with the district---from August to the end of November.

That is from a practical viewpoint?---Yes.

Not the actual period?---No.

Do you visualise some danger from Spring burning in that logs or stumps may be alight and might not be noticed so that when the summer comes they break out into an uncontrolled fire?---There is that possibility but against that if sufficient Spring burning has been done that would be more isolated and likely to cause much less damage carried out in, say, March.

Yes, I am only thinking that if March is the time, the danger is less likely?---The spread of fire could be greater in the Autumn.

If it got away immediately?---Yes.

Have you any ideas as to the alterations of the Bush Fires Act? Do you think any amendments are needed to make it more effective?---In protective burning, if it were possible, the reduction of the four days' notice to neighbours could greatly assist in getting more protective burning carried out because often you will get a few odd days in September, October, November----varying with the district----when you could carry out burning; but if you waited to give four days' notice during that period you might get an amount of rain so that you forget it and leave it and say, "We will let it go now."

Do you think many people in practice worry about giving four days or one day's notice?---In some areas they are very particular, but in many they are not. But often I think that if some means could be devised for protective burning it would have to be very carefully done, knowing the human element. But if it were possible to issue in September, October, November----varying with the district----a sort of blank permit for burning of

grass verges on roadsides to individuals rather than to brigades----they have the power under the Bush Fires Act----subject to cancellation by the local authorities, without giving neighbours four days' notice that they are going to burn their verges, it would be found of great assistance.

What period do you suggest would be a minimum?---I should say as mutually agreed by the neighbours or parties concerned.

In other words, it is not so much a matter of notifying a neighbour but in getting him to agree?---That is right.

Have you any suggestions for amendments to the Act which would increase the protection of life and property? We will not spend much time on the loss of life at the moment because fortunately on this occasion we have not had any such loss; but have you any ideas in connection with loss of property?---I really think there is sufficient already in the Act provided you can get the local authority to exercise it.

Do you find the local authorities do not enforce the provisions of the Act?---Yes, in many instances.

H.E. STRAKER,
17/5/61.

In want particular terms were you thinking of?---Protection around buildings. I think they have got to spend a bit of their local money to carry out some of the inspections for themselves, under the enforcement; and also the punishing of offences against the Bush Fires Act, which some of them --- that has not caused any harm this year, and they just let it go.

Do you think that position will be remedied if the Bush Fires Board takes definite action in that direction, to prosecute people for offences under the Act?---I think it could. I wouldn't like to say.

I realise it is a delicate question as far as an officer of the board is concerned?---I think the possibility is --- my opinion is that you have got to make the local authorities take action themselves.

But you cannot make them, can you?---Unfortunately, not.

Is there any difference in you making them take it and you exercising ---?---The only way to assist that I can see is that more investigation should be carried out by the Bush Fires Board, and it should be obligatory on the authorities to notify --- not wait until August when they make their fire reports, but to notify, even by phone, if any fire has broken beyond its bounds.

When you say, "Not wait until August", they have to put their reports in under the Act by the end of June, haven't they?---Yes, that is correct --- August is the return of officers --- not to wait until June before their reports of fires getting away, but they should report within a reasonable period --- 24 hours, or something like that --- or notify by phone of the breakaway; so that if it is considered by the Bush Fires Board that it is necessary to carry out investigations ---

Would you make it necessary for everybody to report a breakaway fire to the Bush Fires Board with exactly the same enforcement as anybody has to report vehicular accidents to the police?---Yes; I think that life and limb ---

You do realise that it could get down to tiny things?---Yes, it could; but it could be limited within

reason, that they notify the local authority. They are still compelled to notify the local authority, however small it is, if the fire breaks away; but I think that possibly if there was, say, a senior warden over the southern half and a senior warden over the northern half of the State, plus the senior warden present with those men, possibly investigations could be carried out; and then once they find that has been carried out I think that would reduce a lot of the difficulties.

BY MR. MCARTHUR : On the second page of your report you say: "At approximately 5 a.m. fire jumped highway --- easterly gale blowing --- to pasture land on location 250." That was the backburn, not the main fire --- is that so?---I wouldn't say as to that because --- at that time there were sparks coming from the top of the escarpment. I should say it was very possibly the case. It was a matter of the gale blowing very strongly at the time.

I think that at that time possibly the fire could have been some considerable distance away from the highway --- would that be so?---No; she had already jumped Clinton Road at that time.

Clinton Road is quite a fair distance from --- ?---Yes, a fair distance up; but she had swung round in the back; I wouldn't like to definitely state one way or the other.

Further down in that same section you say: "During Tuesday, Fawcett's location 755 and Skinner's location 650 became seriously endangered." Do you know whether that was as a result of the back burn that had been lit along the highway or was as a result of the main fire?---That, I understand, was the result of the main fire. That's what I was given to understand. That was the report we got when we sent the wireless patrol out, that there was danger from the main fire.

BY THE COMMISSIONER: I wonder if you could be more definite about that.

You got a report back?---Yes.

Did the report say which fire was endangering those properties, or did it just say that the properties were endangered?---There again, there are things you do not take note of.

Do not say what you don't know?---I still don't know; but I understood that it was from the main fire.

But you have no basis --- ?---No basis, either one way or the other.

THE COMMISSIONER: Thank you.

(The witness retired)

ALLEN HERBERT SUTHERLAND,
recalled and further examined:

BY THE COMMISSIONER: You are handing in as exhibits a book of forms of permits to set fire to the bush?---That is so.

EXHIBIT EXHIBIT "A 3" Book of forms of permits to set fire to the bush

I notice they are not numbered?---No.

How would you know that the duplicate the man sends to the local authority is the one he is issued with for a particular fire?---It would be signed by the control officer. These books are printed by us and made available to the local authorities to give to each control officer.

If a man got two permits, which he would be justified in having if he was going to burn two different locations, he could send in the wrong form accidentally and there would be no check on that?---No; except the control officer has his duplicate. That was intended to make it easier for notification to the local authority, or to make more certain they had a chance of getting it.

If you were going to do that, I would have thought you would arrange for the Fire Control Officer to send it to the local authority himself?---They are volunteers; and the board thought it was the responsibility of the person concerned to notify.

I realise that, but after all you want to ensure that the local authority gets notice. It is not just a matter of putting the responsibility on somebody. The Fire Control Officer would be the most responsible person, I should think.

On the back of the form you have a summary of the provisions of Section 18. I notice you have included 19, too. It does not say so?---19 was an addition to the earlier legislation.

And the former has not been altered?---No.

THE COMMISSIONER: Just by way of interest, there is a typographical error where it says in 1(b), "specify the day of days". It should be "day or days", I think.

(The witness retired.)

MRS. NANCY ELIZABETH BATEMAN, Farmer,
Bow River, Denmark,
Sworn and examined:

BY THE COMMISSIONER: You have a prepared statement of evidence you wish to give. Would you read it please?---Yes. It is as follows:-

I beg to submit two points for your kind consideration to prevent future big fires and control small fires.

1. That an independent body be vested with powers to police the Bush fires Act in all stages, i.e., inspection of adequate breaks, issue of permits and prosecutions of all offenders doing damage - the general intention of this Act. At present this power is vested in local authority who in the main, are farmers -- the very people this Act was passed against and who naturally constitute 99 per cent. of offenders.

   It is as unreasonable to expect farmers to police the Act as to consider the underworld characters worthy of administering the Criminal Code or the licensees of hotels, the liquor laws.

2. The replacing of the present open burning season which is in autumn and spring when it is too wet and cold for effective burning, with an earlier open burning in February. The average temperature is only 70 degrees in Denmark during February. A warm day with no wind is ideal for burning. It can be controlled. This method was used by the early settlers and the group settlement farmers who successfully kept down the bush with the result that there were no bush fires at that time. It was only when the Act was enforced and the local authority opened the season in the wet months that there have been disastrous fires. When a fire is lit in autumn or spring, the leaf litter remains unburnt through wet conditions and the fires creep up to the drier parts, i.e., the growing portions of valuable trees thus destroying the State's assets. Once prosperous towns as Karridale, have declined when the opposite should be the natural result. They should be increasing in prosperity. When the early settlers burnt in February the forests were in excellent condition. With the scorching of trees by burning in wet weather, we have lost a big State mill at Kent River -- not enough good wood to keep the mill working at a profit. This accounts for the shocking state in which the valley of the giants has been allowed to deteriorate. There are no animals or birds, it may be impossible to put a pin through the bush. The Honourable Mr. Watts, in his letter of the 30th January, 1959, expresses grave -- "Concern the tremendous growth of undergrowth among the timber in various places in which the Forestry Department is concerned." He further states -- "it is only reasonable that thought should be given to differing methods." In the early days, when burning was carried out in February, the forests were clean, the timber excellent and farms

developed economically. It may be noted here that disastrous bush fires occur only in districts where farmers are prohibited from burning in the summer months. Other districts where the season opens in the hot dry weather are free from and have had no bush fires.

The yearly build up of dirty bush is the right material for uncontrollable future bush fires.

I here ask Your Honour to recommend that the prohibition burning period be uniform, i.e., based on temperatures which is only reasonable when we consider the weather conditions vary so greatly in a large State as Western Australia.

BY THE COMMISSIONER: You are tendering as exhibits a letter from Mr. Watts to Mr. M.J.C. Bateman, Bow River, Denmark?---Yes.

And also a page number 2 which appears to be part of a petition signed by a number of people in the Denmark district?---Yes.

| | | |
|---|---|---|
| EXHIBIT | EXHIBIT "A 4" | Letter from Mr. Watts to Mr. Bateman and copy of page 2 of a petition. |

Have you anything further you wish to say?---Yes. Where the language in an Act is loose, and discretionary powers are vested in an authority, it is fraught with grave dangers. We would like norms to be set for prosecutions. At present the position is discretionary. Also, the authority -- the policing authority -- should have certain qualifications: integrity and competence. That would mean a big difference to the present set-up. The forests should be kept in parkland conditions as they were in the early days.

…….. If the materials that caused fires are removed there would be no call for fire fighting, which operation is extremely expensive and has detrimental effects on the health of bush fire fighters.

Do you suggest that the inflammable material be removed from the forests?---I can only go on what has been done in the very early days; that is, not leaving too much bush around, but to keep burning it at the time when it can burn. That procedure will, of course, differ in various parts of the State. Where I am it is very difficult to get a fire going, and unless you burn the bush it builds up so that disastrous fires will occur at some future date, either by act of God or by deliberate or accidental lighting.

So your remarks are confined to the Denmark district?---Yes, because I am more conversant with the conditions there. I have been there for nearly 11 years.

You suggest that an independent body be appointed to police the bush fires in all parts of the State. Would the present Bush Fires Board meet that requirement?---Yes, I think it would. I followed up some correspondence that was reported in the local newspaper, and it does its best, but when you get a local authority that does not co-operate with the board, due to incompetence, it is very difficult. We all have varying degrees of intelligence, and so on.

You speak of the early settlers using a method by which I take it that you mean that the frequent burning of the bush was done to keep the scrub down. How do you know they adopted that method in the early days?---There are still those settlers living in the Denmark district. One of them is Mr. Saw, who has been in Denmark for 52 years, and he can speak of conditions that existed in that period.

When you say that you prefer, you think it is preferable to burn in the summer months rather than in the

months when the conditions are damp. You speak again of Denmark, but I do not know whether you would agree that such a practice would apply in the more northerly parts of the State where the summer can be particularly hot and dry and if one lights a fire one is not sure whether it can be put out in, say, a week or 10 days?---Yes, that is right. I refer only to Denmark, and for that reason I ask for the prohibitive period for burning be based on temperatures.

Then a zoning of the State, according to the temperatures in the summer time, would meet that requirement, would it not?---Yes.

When you say that a prosperous town such as Jarrahdale has declined, when the opposite should be the natural result, do you mean that had they not had severe fires there would have been enough timber to enable those mills to keep going?---I did read that in the early days Jarrahdale enjoyed prosperous times and the people even had their own currency and, at that time, they must have had good timber. They had the natural timber and their asset was good timber. The fact that Jarrahdale has declined could be due to the fact that there is now no good timber, although, over the years, timber does grow all the time. However, you cannot get good timber when you are not controlling the forest. You get a lot of undergrowth and that is not good for the timber. I have an old Group Settlement house myself and when I put some additions on to it I noticed that the new timber did not come up to the old timber already in the house. That is due to the damp conditions under which the timber is growing. It gets damp and then borers get in the wood, which affects the timber. The State spent a lot of money on establishing the Kent River mill, but that closed down because they had to discard a lot of timber which was not marketable.

Was that jarrah or karri?---Both.

Of course, at Kent River, you are getting on to the edge of the region where the natural occurrence of those species exists, and when that happens you would get a lot of natural bush?---Yes.

Referring back to Jarrahdale, would you appreciate that Jarrahdale would have had to close down in any case because they cut the timber faster than it would have grown in any circumstances?---That is quite a possibility, but you are in a very good State and you would be surprised how quickly the bush grows. At my place I have bush growing which is only three years old and it is over 20 feet high.

Karri or jarrah?---Both. We are in an area where high timber grows fast.

I am surprised to hear of jarrah growing at that rate; it is much faster than the average rate of growth?---Yes, because we have a very high rainfall.

In your statement you refer to the Valley of the Giants. Where is that?---My farm is on the road to the Valley of the Giants. I am just on the outskirts of it.

It is close to Denmark?---It is nearly 30-odd miles from Denmark.

Was not that the valley which was burnt out some years ago?---It was burnt out in 1937 and in 1950.

You say that it may be noted here that disastrous bush fires occur only in districts where farmers are prohibited from burning in the summer months. Other districts where the season opens in the hot dry weather have no bush fires. What districts are you referring to when you say that?---Districts such as Narembeen, Kondinin, and perhaps Beverley. They have their burning season in the 80 degrees, temperatures at which we are not allowed to burn.

Where are those districts? Are they north of Perth?---They would be north and east.

I appreciate that if you go far enough north in Western Australia you get a summer rainfall climate. Are those towns far enough north to experience wet summer conditions?---No. At some of those places in the north they did away with the prohibited burning periods altogether. I remember reading once where Ashburton did away completely with the prohibition period because they said it was not suitable. I read that in the newspapers some years ago; perhaps two years ago.

BY MR. HALE: Would you agree that the vegetation in Denmark is considerably different from that in Narembeen, Beverley and the other places you mentioned?---Yes, I would agree.

Would not you agree then that a fire could be controlled more easily in those eastern districts than it could in the timber country?---There are problems in both areas. My daughter was on a visit to a friend who owned a farm in Beverley, and she said that the amount of dry fodder that was left constituted a very high fire hazard. It was very high in Beverley. We have also the other type of hazard in the farming areas of dry crops that have been left by farmers who perhaps have areas too large to enable them to exercise the necessary control.

BY MR. OATES: I am wondering whether you may have made a mistake in quoting Jarrahdale as the place which had its own currency, etc. I think, in fact I am quite certain in my own mind, that it was Karridale and not Jarrahdale?---I may have made a mistake. I did not expect to give my evidence so quickly. I thought the Commissioner was going to visit Denmark where I have quite a lot of records.

(The Witness retired)

Sitting suspended for lunch.

ALFRED CHARLES SHEDLEY, Chairman of National Parks Board of W.A., residing at 154, Mill Point Road, South Perth, sworn and examined:

BY THE CHAIRMAN: You have a statement prepared for presentation to this Commission. Will you proceed to read it?---Yes. I have a map here showing the various areas to which I refer. My statement is as follows:-

A. LIST OF RESERVES VESTED IN THE BOARD - SEE MAP:

(1) Those considered to be important as flora and fauna reserves are -

(a) Stirling Ranges Area 269,155 acres

(b) Porongorups Area 5,384 acres

(c) Nornalup Area 19,793 acres

(d) John Forrest National Park Area 3,656 acres

(e) Yanchep Park of two small areas, one providing feed for the Koala bears. There is also a small area of beach reserve not included in this acreage. The main area is Yanchep Park of 6,661 acres.

(f) Serpentine Falls area 1,440 acres

(g) Greenmount area 127 acres, on the escarpment of the Darling Ranges.

(h) The Knoll, Gooseberry Hill (not yet vested in the board but about to be vested), area about 50 acres.

(i) Lesmurdie Falls, another area along the escarpment, area 81 acres.

(j) Araluen area 50 acres.

(2) Camping and Recreation Reserves:

(a) Hamelin Bay area 366 acres

(b) Crawley area 66 acres

(c) Penguin Island area 50 acres

(d) Yanchep Beach area 44 acres

(3) Small Areas for Special Purposes:

(a) East Perth disused cemetery area 11 acres

(b) Keanes Point occupied by the Royal Fresh Water Bay Yacht Club area 6 acres.

(c) "Bernies", part of King's Park on Mounts Bay Road, area half acre.

(d) Old Mill, South Perth area half acre.

The reserves which are listed under heading (3) are within the metropolitan area and present no fire problem. The same applies to Crawley, Penguin Island and Yanchep Beach. Hamelin Bay was originally held by the Margaret-Augusta Road Board who requested to be relieved of the responsibility of developing the area, mainly by the erection of toilets and change rooms. These are now being built and when completed it is proposed to hand the reserve back to the local authority.

With regard to reserves listed under A (1) above --

(a) Stirling Range:

An area of about 270,000 acres, approximately 40 miles long (east-west) and 11 miles wide (north-south) situated east of Cranbrook. Rocky outcrops rise to a height of over 3,600 feet altitude from the surrounding plains which are only 200 or 300 feet above sea level.

The majority of the area consists of bare rocks or shallow soils carrying a rich variety of wildflowers. Thickets of blackbutt and jarrah amounting to perhaps five per cent. of the area occur at the base of the hills.

Two roads running in a north south direction and approximately 20 miles apart traverse the area, i.e., through Chester Pass and Red Gum Pass with short spurs leading to the high points.

The Main Roads Department has agreed to improve the Red Gum Pass road, the tracks into Mondurup and Bluff Knoll and the Plantagenet Road Board has agreed to improve the track into Toolbrunup.

A request is being made to the Main Roads Department for financial assistance in constructing 20 miles of road to link up the Red Gum Pass and Chester Pass Roads.

No fire control has so far been attempted by the board but it is hoped to appoint a ranger to exercise general supervision over the Stirlings and Porongorups reserves. I understand that there is no great fire hazard from this reserve and that after a fire it takes three or four years for the scrub to recover. The Borden and South Stirling Bush Fire Brigades carry out regular controlled burning on the north and south boundaries respectively.

(b) Porongorups:

A belt of karri country situated east of Mt. Barker. Forests Department prepared a fire control plan for this area which is bounded on the north east and south by private property and on the west by vacant Crown lands carrying a fairly heavy stand of poor jarrah.

The plan provided for construction of fire lines and water points, most of which work has been completed, financial assistance having been rendered by Main Roads Department and the work carried out by the Plantagenet Road Board. Some improvement of the tracks is necessary and some thought is now being given to ways and means of doing so.

At our request Water Supply Department installed a hydrant on the water main from the dam for use buy the local bush fire brigade, which has agreed to exercise fire control over the reserve. Consideration is now being given to the appointment of a ranger whose services will be employed on general supervision over the Stirlings and Porongorups.

There is a water supply dam on the Porongorups which serves Mount Barker. To continue -

(c) Nornalup:

The area is divided into two well defined sections - the north which is heavily timbered with karri, tingle, red gum and jarrah and the southern section which is coastal sandy country - clothed mostly with scrub and with occasional groups of trees.

The area is included in the Forests Department working plan for the district on conditions:

(1) Fire damaged karri be removed for sawmilling at royalty rates for the district and proceeds credited to Forests Department.

(2) Forests Department accepts responsibility for management and control involving construction of roads and fire lines according to plan agreed upon.

(3) Forests Department agrees to spend a certain amount each year even though royalties do not cover expenditure.

As work has been held in abeyance for the past year or two mainly because there has been little or no revenue from royalties, (timber getting has been concentrated on already alienated land), an approach has been made to the Main Roads Department for £9,500 required in the construction of roads and fire lines; so that more controlled burning can be carried out, particularly in the heavy timbered country.

(d) John Forrest National Park: (it is in the Darling Range, 15 miles from Perth).

Jarrah, red gum and wandoo country in the Darling Ranges with some steep country to the west. Following advice from the Forests Department a fire control plan has been in operation for a number of years. Fire lines have been constructed to break up the 3,656 acres into small compartments which are regularly burnt according to plan.

The Superintendent of the National Park has had training in a Forests Department fire school and similar equipment to that at Yanchep is on hand. Co-operation is maintained with the Forests Department Mundaring Weir headquarters but we are now practically independent.

(e) Yanchep Park: (About 35 miles north of Perth)

Tuart limestone country. Popular tourist and picnic reserve which is well developed. The superintendent has had training in a Forests Department fire school. The area has been broken up by a number of fire lines and regular controlled burning carried out. A power pump (Floodmaster) with 200 gallons of water is available for fire fighting.

A Forests Department headquarters is being established at Yanchep Park, and co-operation between the two departments should prove beneficial.

(f) Serpentine Falls:

Steep and rocky slopes on the edge of the Darling Ranges north and south of the Serpentine river. Fairly well timbered with jarrah, red gum and wandoo. Access difficult with only one or two tracks through the area that are trafficable. No labour employed except a part-time collector of parking fees. Forests Department has been asked to prepare a plan of fire control for the area covering road and fire line construction and regular controlled burning.

(g) Greenmount:

A lookout in the Darling Range escarpment. No fire control.

No fire control has been attempted. It has only recently been vested in the board.

(h) The Knoll:

Another lookout on the Darling Ranges not yet vested in the board.

(i) Lesmurdie Falls:

Mainly a scenic reserve with extensive views over the metropolitan area. Steep rugged country with sparse tree growth. No fire control so far attempted.

(j) Araluen:

This reserve consists of a narrow strip of country along the Canning River below the Canning Dam. No attempt has so far been made to develop this reserve, which carries manly flooded gum, red gum and introduced wattles. It could be made an attractive picnic site and scenic area for picnickers to the Canning Dam. If finance were available fire control could be exercised as development proceeded.

BY THE COMMISSIONER: Do you consider in general that the provisions made for the protection of these areas from fire is reasonable?---No, I think we could do very much more if we had the finance. After all, the National Parks Board has only been established for a comparatively short number of years. I think it was in 1942 when the board was established, although some work has been done on some of the reserves since 1930 when unemployment relief workers were used.

Are you entitled to any revenue you get from reserves from parking fees, sales of timber, and gravel, and that sort of thing?--- Yes, we do collect parking fees on some of the reserves--Yanchep and John Forrest National Park. We do as well collect camping and caravan fees, but that does not amount to very much. The main revenue is from parking fees and also we derive some revenue from rentals from yacht clubs at Crawley and for Gloucester Lodge and Yanchep Inn.

And can you spend that money yourself or is it paid to Consolidated Revenue?---No, we manage our own affairs in that way. Of course we are not independent of Treasury help. We receive an annual grant.

How much was the grant last year?---£37,000.

That is the year now in operation?---The one nearly completed.

How is that mostly spent -- in improving these places?---Yes, we have only a limited number of men employed. I suppose at Yanchep there would be more than anywhere else, because there are 15 or 16 men. At the John Forrest National Park we have four, and at Crawley we have three. At the other centres -- at Porongorups and Stirling we have no-one at present, but it is intended to employ labour and establish a house there so that some supervision can be exercised. At Nornalup we rely upon the Forestry for general supervision, and recently we appointed a local committee to carry out the policy of the board. We have leased Penguin

Island to a holiday camp lessee and we only receive a nominal rental of £2 a year. The same applies to Hamelin Bay. Beyond that our main expenditure is on wages. We do prepare estimates and a programme of work each year for each reserve.

Could you say what you spent this year solely on fire protection?---No, I could not say that. That item was not kept separately. It goes under the heading of Wages and Expenditure; but we do feel there is room for further work in that regard, for example, at Lesmurdie and Serpentine and those areas down in the far South-West. We have just recently prepared an estimate and list of improvements which we consider are absolutely necessary. It means that we will want perhaps another £15,000 over and above the £37,000 which we had this year. But even that will not be nearly sufficient to carry out a fire control policy over many of these southern areas.

Do you feel that total fire control is necessary for the flora reserves, or do you think it is all right to burn them over in strips or patches every few years?---I think it is very necessary to carry out controlled burning over a period of three or four years. We have a regular controlled burning in National Park and Yanchep. I feel that if we do not do this we would get burnt out and lose most of our -- we would not lose it but it would very seriously affect the vegetation.

Frequent burnings could make a change in the composition of the vegetation could it not?---Yes, but I think that controlled burning carried out at the proper time would cause very little damage.

Have you any plans for the absolute protection of any portion of it all?---Yes. At Nornalup in particular we have plans for retaining certain areas there in their virgin state. Some of the country has been very badly fire damaged as you have heard. We are arranging with the Forests Department to remove some of those fire-

damaged trees. But some of the areas down there contain very valuable trees, and we are endeavouring to set aside areas of 50 to 100 acres of virgin country. However, we have to carry out controlled burning over the surrounding country and there is scope for that, because it is not all first-quality forest country.

Do you get fees from apiarists?---No, we do not. The Forests Department collects any fees. It consults us about apiary sites.

And they collect the money? Would you not be entitled to that money really?---I think so. But I do not know that there are any apiary sites on our reserves.

I mention it because we have been advised that the apiarists have suffered considerable losses through the burning of flora reserves from Dongara southwards?---Our control extends only 35 miles north of Perth. We do not control all the big reserves. In fact, there are many we do not control.

I was going to ask you that because there were some down in the Pemberton districts where the fires were this year, which were under the control of the local road board?---There are areas in the Pemberton district, marked on the map, which are not under our control but are under a local committee which receives a grant from the Treasury. The committee works under the same Act as the National Parks Board.

How does that come about? Why does the department place such areas under the control of a local committee and not under you? Do you know what influences them?---No, I do not, but I understand that recreational reserves are vested in the local authority.

Ours are more national parks with some value as a tourist and vegetation association.

I see: More in the way of a flora reserve?---Yes; but we have recently -- I do not know -- but can I say--?

You may say anything you like to me?---We are interested in formulating a policy which should apply to all of the reserves irrespective of whether they are under our control, or just made national parks or reserves, and which are just held by the Lands Department. There are many such reserves. We consider they should all be under the National Parks Board where a uniform policy could be adopted for them all. That would apply, of course, to fire control as well. Of course, that would mean money. It seems to be very necessary if we are going to reserve them for the future.

As far as the expenditure of money is concerned, I presume you would only recommend it if you considered it necessary; and no doubt the National Parks Board would consider these factors?---I feel that is so. I might mention the problems of carrying out controlled burning over an area at Esperance. Recently a big area there was declared a flora reserve. But it will be necessary, of course, to have a local committee or even a mobile gang to carry out controlled burning according to the policy of the National Parks Board.

Who has control of that Esperance country at the present time?---The Lands Department.

They probably will allot it to somebody, I take it?---I do not know. There are many that are not vested in the National Parks Board. We could not do anything much with more reserves with our present finance.

Where is that half-an-acre called Bernie's?---That is a small area that was taken away from the King's Park Board and vested in the National Parks Board. It is a night eating house. It is a source of revenue for us.

The board that manages King's Park does not manage any other park?---The King's Park Board manages only King's Park. We have nothing to do with it.

You speak of a place called Red Gum Pass in the Stirling Ranges. Has that got marri running through it?---Yes.

But generally speaking there is not much timber on the area?---Not much.

THE COMMISSIONER: I will now put in the map as an exhibit.

EXHIBIT EXHIBIT A5: 15-mile map of the South West Division showing the location of areas under the control of the National Parks Board of Western Australia.

BY THE COMMISSIONER: Who controls all the area around the Caves at Yallingup?---I am not sure about that. It was originally vested in the General Manager of State Hotels, but I am not sure what happened. I think it was vested in him by name; but when he retired, I do not know what happened. Those reserves have been referred to us and we have agreed to take them over if the Lands Department wish to vest them in the National Parks Board.

And you will make plans for their protection from fire?---If we took them over we would.

And that would be carried out by the Forests Department on your behalf in that district?---It probably would. We try to get the co-operation of the Forests Department wherever we can, as you noted from my remarks. There are many places where we work in close co-operation with the department. There again, of course, if it were ever decided to form a mobile gang for the establishment of fire lines and tracks and controlled burning, it could come under that mobile gang. I think it has some merits. In many areas it could be brought under control.

The only thing I would suggest in that connection is that defence in the event of fire arising would probably be carried out by the Forests Department and other local authorities; and it might be of some advantage if they made your fire lines and did the controlled burning for you so that you would know where it was?---Yes.

(The Witness retired)

VIC MARKOVIC, Farmer of Kewdale and Karridale, sworn and examined:

BY THE COMMISSIONER: What is your name and address?---I am Vic Markovic.

What is your occupation?---I am manager of a building company and a farmer combined.

And you are a landowner?---Yes.

Can you tell me the number of your location?---Sorry, I could not.

Can you identify your locations in some way - who they adjoin?---McLeod's Creek; Mr. Espinos; and the righthand side is Government.

The righthand side, looking to the main road?---Looking from the road on the right side is Government land; and at the back would be Mr. Wall.

What road are you on?---McLeod's Creek Road. I have two properties. The older property would be - it would be Government again on the lefthand side; and the righthand side, Mr. Webster; the back part, Government again.

Do you know if the Government land is forest land?---Yes; in both cases forest land.

Do you live up here in the metropolitan area?---I am two weeks here and two weeks outside.

You are not a fire controller?---I am not.

Are you a member of the fire brigade?---I did not join because I really should move on the 5th July; I should move altogether to Karridale and start farming, and then I will join the fire brigade.

THE COMMISSIONER: I will read out your statement, which says---

I, the undersigned, Vic Markovic, resident of Kewdale and Karridale, appeal to the Commission and accuse those responsible for the damage to my property and to Government property done by the bush fire.

Who started the fire, why did it spread so rapidly, should the Forests Department be blamed for not burning periodically? I am going to let our local authority answer this part.

I want to point out only the few specific points which I witnessed at the fire: Letter sent to the Bush Fire Control Board, as follows:--

> Bush fires have been and are going to be, we can't do much to stop them, but to control fires so that they do not spread and end in disaster, we have to improve a lot. It is so easy to blame and criticise people and places where the fire started, why this party or the other one got less help, why communications between isolated houses were cut off when a falling tree broke the telephone wires and blocked the road. I dare to announce that the complete system of fire protection is wrong.

V. MARKOVIC,
17/5/61.

We are born individual courageous fighters, but to defend a ruthless enemy on a large scale, there must be a well-organised army with a nerve centre and proved communication. The blame lay at both ends. The top of the Government does not supply the necessary equipment to the country and at the other end, the man in the outback does not demand his Government to give him the tools for defending.

1. Every township should have on both sides a similar fire hazard scale as in Harvey and a local traffic policeman should set the sign, so that the bypassers would know the level of fire danger.

2. Every township should have an appointed Fire Registered Station with a visible sign "F.R.S." Where any bypasser could report even the most innocent fire. It should be law that a bypasser ignoring a fire in time of fire danger and not fighting or reporting it will be punished as neglecting a national asset.

3. Every district should have a Headquarters with shortwave and fire officers and police in the district should have walkie-talkie, so that it does not happen as in the last situation, that an officer had to travel hundreds of miles to different points of danger to obtain information.

Every headquarters should have a special map of bushlands, paddocks, roads, houses, creeks, water-holes, water supplies, defence lines and retreat ways.

The situation should not be repeated, where a community like McLeod's Creek with women and children calling for help was answered "We can't reach you, your road is blocked by a tree". The words, "We can't" should never exist in a case where a human life is at stake.

4. Every headquarters should closely collaborate with the next one and no man's land should never occur.

5. Every headquarters should know exactly how many bulldozers, trucks, water-tanks and power-saws are in the district and where they are situated and the moment the alarm is sounded these should be mobilised under strict orders from one Commanding Officer.

It occurred that on the main road there stood two bulldozers belonging to the Forests Department and a loader belonging to the road board but they could not be used as the drivers did not get any orders to help and the work for which he was sent out was fulfilled.

It looked to me as in the war, the artillery and the infantry would not collaborate together.

6. When a fire is reported in a dangerous time of the year and the weather report is "hot and windy", this should be sufficient warning even for a newcomer in the bushland to mobilise.

A police force should be sent immediately from the closest town and be used for protecting and evacuation. There should be reinforcements.

Reinforcements -- with pride I was observing holiday-makers joining our battle; with hope and relief the coming trucks of Collie minors employed by the Forest Department, but I was disgusted when some who had been stationed at Cudardup Hall did not act as would be expected in a stricken area of disaster but turned the place into a wild beer picnic party, ignoring resting exhausted women and children in the hall, and an expectant mother, ignoring our beggings and warnings through the night. Why was it this party did not have a commander? Where was the police reinforcement? It is up to you decent Collie chaps to deal with the hooligans.

7. I am starting at the beginning. Means of communication, fire-fighting equipment, asbestos gloves, gas masks - it all costs money but does it not cost thousands of pounds a year, disaster after disaster? Telephone lines, roads, bridges - is this not all our national asset? We are giving away in Perth national assets. Go and watch - every three months, Minister of Supply sale: Radio equipment for ridiculous prices, signals equipment, asbestos gloves, coats and sox ex Navy, thousands of gas masks, fire-fighting engines, heaps of shovels and axes, 500 gallon portable water tanks and jeeps for very low prices.

Do we have a national economist who protects our interests? If we have not appoint one!

I experienced the fire and I salute to the men and women who fought courageously. I appeal in the name of all citizens to be united and organised to defend every individual home. After all, Australia is great only by the individual homes.

THE POINTS:

1. Reporting centres for fire.

2. A law to make it obligatory for every citizen to report every sighted fire and to prevent it from spreading.

3. The Government to supply communications and fire fighting equipment, experienced firemen should visit district by district and lecture on fire fighting equipment and how to make use of local bulldozers, tractors and power-saws.

4. One officer-in-charge or his assistant should be full-time in the headquarters during the fire. If necessary, he should have the power of full mobilisation of every capable man or woman. In time of disaster when national assets are at stake there should not exist voluntary work, it should be a national duty!

5. Equipment, no matter if road board, Forests Department or private, if needed, has to be at the disposal of the Commander of the situation.

6. Police stations should immediately ask the higher authorities for reinforcements.

7. A fireman, even if only belonging to the volunteer fire brigade, should have no right to refuse help or neglect a burning property. A law to punish a man belonging to a fire brigade and neglecting or refusing to help should be established. (What would be the public comment if a life-saver watched a drowning person and would not help him?) I am pointing to this party as this situation occurred in the last fire and even more, it was a captain of the fire brigade!

8. "Duty and honour" must be the motto.

BY THE COMMISSIONER: Is that the evidence you are submitting to the board?---Yes.

Exactly as you wish to say it?---Exactly.

What provision did you make for the defence of your own property in the Karridale district?---First of all I cleared around the house and the paddocks; and I have 250 gallon tank, 4 chemical fire extinguishers, 3 portable knapsack sprays, and all the hand tools that are necessary. I have my own bulldozer and a tractor with a front loader which could be used if necessary. To my sorrow, the bulldozer fell into a swamp and I could not get it out.

The fire went through your property?---Yes. I had a policeman next to me and a Perth holiday-maker who helped me to fight the fire. We lost one house and all the outbuildings, but I saved my own house - a new building. It burnt out next day, 26 hours later. I do not know how, but it burnt.

What did you say then?---Twenty-six hours after the fire, my new house burnt out.

You say you cleaned up around your property?---Yes.

What is the nature of the cleaning up you did around the boundary?---I put a cultivator around.

How wide did you cultivate?---Twice, I went. It was quite wide - a 10 ft. cultivator.

That is a total width of 20 ft.?---Yes.

You consider it was all clear of inflammable material?---Yes. One thing is that on every road in the South-West there is a heap of timber from the road board, and that is a hazard to any property. It does not help if a farmer clears out two chains, because the burning heaps on the side of the road start a fire; and so it happened at my place.

That is dead timber?---Yes. At the moment I have a man on a bulldozer clearing out all the timber on my property because I do not want that happening again.

Why do you not, yourself, burn that timber on the road? Is it against the law?---I do not know. I am only 2½ and a half years out, and I burn a good lot of it. Then it would really burn your fences. It lies under the fences, really. The road board and telephone people all push it down close to our fences, and when the fire starts the fences have no chance to survive.

Did you ask the road board or the P.M.G. Department to do anything about it?---No.

Have you done much fire fighting other than in this last fire?---All the time, from the beginning to the end, I was there. People said the fire was on, so I went and volunteered to do what I could. But everybody took it so easy. The men were sitting on the road, 20 of them, and playing in the bush. I asked them what was going on and what about McLeod's Creek, and they said, "You will get the bloody lot tomorrow."

You consider that there was too much apathy in the district generally?---It was not taken seriously. I did not see any commander or anyone who could give orders. I went to the Post Office at 10 o'clock and I asked the people who were standing around, "What about the shop?" and they said it belonged to Millars and that it was insured. They said to let it burn; nobody took it seriously.

Have you been in any fires in previous years?---Yes, I was burning out on my own property the year before and I was punished for it. I paid a £33 penalty for it. I had bull---dozers in an effort to do some back burning, but the local fire captain put me in on about nine charges. He looked for everything he could find to charge me with, but the judge discharged most of them because he could see that they were fabricated .

You do not like the local fire captain?---No, I do not. It was through him that I lost my property. He refused to come and help save my property.

What did you do to be fined this £33? Did you burn it in a prohibited season?---Yes, the day before the opening of the burning season I did, but only in a corner where my property was joined to Government property because I knew that the burning of the trees on the Government property could fire my property. So I burnt only two or three acres to look after my property.

You did not seek a permit?---I went three times to Mr. Bushby but he was not home.

You were not refused a permit?---No, I was just not lucky enough to get him at home so I said, "We have five or six people here, and we have a bulldozer and nothing can happen because we can easily control it." However, a big artificial case was built up against me, but I do not know why. The people who built up the case and who tried to be so important by doing their duty ignored the fire and when the fire went through my

property a neighbour asked him to help, but he said, “I would not go in there; I would pull it down.” The captain of the fire brigade refused to come and save my property.

You are speaking of this last fire again now?---Yes, I am sorry.

You want to forget about the past fire; that is finished and done with?---I am looking to the future. I do want to work hard to build up my property again; I do not want it to happen again. For this reason how can I be sure that my property in the future will be protected by the fire brigade if there is someone like Mr. Jones who does not like me.

That is something you will have to adjust with the local people when you live down there. You will find it necessary to co---operate with them and work in with them?---I would not say I have any enemies. You always find in every community people who, for a certain reason, would not like a person. I cannot think of any reason why the captain of a fire brigade does not like me; it is a private affair apparently.

I think the trouble is that you do not like him?---Yes, after what happened to me; after he refused to help, and I helped to save his property the day before.

What was he doing when you asked him to help save your property? Did he have some other work in hand?---When the fire started on Friday I went Friday to his property and helped to save his home, his hay shed and stables. He was in hospital at the time and he came right home and next day I met him and there was no ill---feeling, but he did not say “Thank you” for helping to save his property. As the captain we had to be willing and bulldoze around his property because he did not have any protection against fire. That night we had to take the truck and the bulldozer and go around his paddock to protect the rest of his pastures because he had no protection whatever.

What was he doing when you asked him to help you?---I am coming to this point. On Saturday I went in to attend to my eyes and I came back and after two or three hours I found my house was on fire. Then I found out from another neighbour that when he saw the fire he went to the captain to find out what to do and the wife of the captain said, "My husband is in the paddock", but from what we heard he was somewhere else. I heard that from the Police. Two days later I was in Perth and a tree was on fire next to my milking shed on my next door property and my neighbour went to him and he said that the tree was on fire, but he said "I would not go into his joint" and it burnt down my property. His duty was to go in and chop the tree down.

Did you not say that he came out of hospital two or three days before? He may not have been very well?---The day before he went to hospital he was working and he worked after he came out. He was working on chopping posts which is very hard work. He was working up to when he went to hospital. He was hay cutting and hay baling and contracting for himself. When he came back he was working on his fences, etc., so I do not know how sick he was and why he refused to come to save my property. If a fire brigade captain can refuse to help a person save his burning property---.

I am afraid you will have to refer to the Bush Fires Board about that. I cannot help you in regard to that; I am only conducting an inquiry?---It is a voluntary organisation, and being voluntary they do not have to do it. They have very little protection whatever. It is better to pay and have an official fire brigade and know that we are really protected. At the moment we are not protected. We never know what sympathy we have with a certain captain.

You speak about the Government supplying fire---fighting equipment. What equipment do you consider

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the Government should supply?---Portable pumps.

Portable power pumps?---Yes, I saw plenty recently going at a recent auction for £35 each. A pump such as that would help a great lot. It could be taken from place to place. I saw asbestos gloves and high boots being sold, too. I saw men fighting in slippers at the last fire and with no shovels.

People are expected to buy those sort of things for themselves, such as boots and gloves. I do not expect the Government would buy those sort of things?---To protect their own property yes, but to protect Government property they should be supplied.

When you speak of Government property, what do you mean?---Bridges and halls---they are all government property. Why should I go and protect a burning telephone post?

When you say the Government, do you mean the Parliamentary Government here in Perth, or the local authority?---I did not mention any Government.

You suggest that they have an F.R.S. station. What does that mean?---It means a fire report station.

Who would be the officer in charge of that?---It could be the policeman or the traffic inspector -- let them do some useful work.

Has the traffic inspector ever caught you?---No, because I have not given him a chance.

Are you suggesting one headquarters for every road board?---I mean every community.

You mean every settlement?---Yes.

You spoke of two bulldozers belonging to the Forests Department?---They stood only 100 yards from McLeod's Creek for hours while the fire was going through.

You mean while the fire was going through that particular area?---Yes. There was the road board bulldozer and a front and back loader which could have been used.

How did you know they belonged to the Forests Department?---Because I spoke to the man.

Do you know his name?---No.

You asked him?---Yes, I thought they were going to help.

They said that they did not have any orders?---Yes, they said, "We cannot take anybody's orders. Our duty is to our bosses".

You say the police should evacuate the population when necessary?---Yes.

Do you believe in evacuating people when a fire is coming on?---Women and children who are screaming and hysterical cannot be of any use at all in a fire, nor can pregnant women. They should be evacuated and the men left to protect their own properties.

You speak of the people from Collie being at Cudardup. Can you tell me of your own knowledge that you saw them drinking beer?---Not only drinking beer, but throwing bottles around and dancing. I was told to forget it and not make it worse. There is no personal bitterness in what I say.

I take that for granted. You are on oath and I expect you to answer any questions you are asked fully. Had some of these people been fire fighting?---Some of them had been on a strip of 5 or 10 chains from the store which they put out.

That is all the fire fighting they did?---Very little.

You are sure of that?---Yes. These people came from the paddock about 100 yards from the store and did very little fire fighting.

Do you know of any case where the people do not make all their fire fighting equipment available for use?---No.

Mr. McArthur will show you this map. Will you show him where your property is?---Very well.

BY MR. McARTHUR: Mr. Markovic has indicated he owns portions 3186, 1957 and 1966. (To the witness): Can you tell me what time the fire went through your property?---Between 1 and 2. I was helping Mr. Bimbo at the end of McLeod's Creek and I heard a roaring and I could see the fire had started on properties in different places.

(The Witness retired).

THE COMMISSION ADJOURNED.

THURSDAY, the 18th MAY, 1961.

DR. GERALD CARTMEL, Medical Practitioner, residing at Pinjarra: sworn and examined:

BY THE COMMISSIONER: You have prepared some evidence which you wish to present to the commission. Would you read it please?---Yes, Sir. My statement is as follows:---

I beg to submit the following evidence to the Commission in the hope that it will be relevant to the inquiry:---

(1) I would like to draw the attention of the Commission to the proximity of the forest to my house at Dwellingup. This house was bordered on three sides by trees which were as close as 14 paces from the side and 20 paces from the front of the house. This house had been part of the town for 40 years yet trees under the care of the Forestry Department were permitted to grow so close that the personal danger of trying to protect the house from being burnt constituted an unreasonable risk.

It is suggested that a forest firebreak should surround any established forest community. This firebreak should be sufficiently wide as to allow spark ignited fires to be controlled without danger from the heat and falling branches from the forest fire front.

(2) I would like to draw the attention of the Commission to the error of judgment in assessing the risk of the forest fire involving Dwellingup and to the lack of a method of warning the inhabitants of the town.

On Tuesday, the 24th January, I was called back to Dwellingup by my father who considered that there was a risk of the forest fires spreading into Dwellingup. I went to the Forestry Department Headquarters at approximately 3.30 p.m., 5.30 p.m., and 8.50 p.m. to inquire about this risk and on each occasion was informed that there was no risk or that the risk was minimal. At 6.30 p.m. I initiated the evacuation of the Dwellingup hospital. A little later I asked two forestry officers if this action was reasonable. I remember the rather pitying way in which I was told that it might be a nice idea to get the old folk clear of Dwellingup as there might be a lot of smoke. At this stage the fire had jumped the Dwellingup-Banksiadale road.

The danger was not appreciated by the Forestry Department where my father, Father Brennan, and myself were reading the signs correctly but trusted in the confident opinion of the experts.

DR. G. CARTMEL,
18/5/61.

(3) The following statement is an impression put forward for consideration:

My respect for the endurance and courage shown by Australians in this disaster is immense. But would better organisation have prevented excessive fatigue with attendant errors or judgment at a critical time? Fire-fighting seemed to be on a day-to-day basis without organised sleep even though it was acknowledged on the 19th January that the fires would last at least three weeks in the prevailing conditions.

When you say, "Trees under the care of the forestry Department were permitted to grow so close that the personal danger of trying to protect the house from being burnt constituted an unreasonable risk", do you know which trees were under the Forests Department?---I assume all the jarrah trees growing around the garden of my house were under the care of the Forestry because they had been cleared by the Forestry on the authority of the Forestry Department headquarters.

I think there is some reason for doubt. I am not trying to tell you things but I think you are not aware that the hospital is built on a hospital reserve and not on a forest reserve. Were you aware of that?---Yes.

And the house?---Yes.

And even then round about your house was the Dwellingup townsite reserve which kept any Forests Department trees a good way from your dwelling. I think it might revise your ideas if you see this plan of the Forestry Department, so I am suggesting you have a look at it. (Witness shown map)?---This is news for me and I have been in Dwellingup for approximately nine months.

I appreciate a plan is not the sort of thing you would worry about, but I am trying to put the position correctly to you now?---There are no measurements on that map so I would have to take your word.

Even if that were so, I was under the impression from what I had been told since I had been in Australia and at Dwellingup that if I cut down one of those trees the forestry would not appreciate it at all. Most of the information I obtained was directly from forestry officers.

A lot could have been cut down without any complaints or if there were complaints they would not have been justified. Anyhow, does that make any difference to your evidence?-- In the degree of responsibility, yes; obviously, it does.

If I remember rightly the Forests Department did burn through part of the hospital reserve before?-- I know they did burn previously and because they had I assumed that they were responsible for that area -- a reasonable assumption, I think.

Yes. I am not suggesting that you should know these things, but I wanted to point out the position to you. How tall were the trees you said were about 14 to 210 paces from your house?-- I looked at them yesterday and asked a couple of others and they said they would be about 50 to 60 ft. high.

They were probably there before the house was built?-- I suppose. I do not know how fast the trees grow.

Did they have any dead wood in the tops of the trees which could catch alight?-- I do not know; but I do know that in fact the tops of the trees were burnt.

The leaves were burnt off?-- Yes.

Generally the danger arises from the tree when it has a hole or a rotten limb at the top and a spark lodges there. It then catches fire and spreads from one tree to another. So if you had defective trees of that nature near your house, they should have been removed?-- I would not be prepared to answer that one, not having looked for it.

When you said that a forest fire break should be put around a community, have you any ideas upon the type of the size such a fire break should be?-- No. I did try to consider the width but that obviously

should be decided by someone with more experience than myself.

You speak of the lack of method of warning the town with regard to danger. You say that you went to the forestry office three times to inquire about the risk and that each time you were told there was no risk or the risk was minimal. Did the same officer inform you each time?---I would not be prepared to say because on the first occasion there were several officers there and that seemed to be the general opinion. I can say Mr. Campbell was there and I know Mr. Hatch was.

Can you indicate the name of any officer who told you the risk was very small?---Yes. The two I have mentioned. Certainly it was Mr. Hatch because he was the only one I saw in the building at 8.50. I spoke to him because I know him personally and he is a friend.

Who were the two officers you spoke to later on?---One was Mr. Styles, and the other was Mr. Edwards.

And I suppose that was where you got the information about the fire jumping the road?---No. I went to the hospital just after I had ordered its evacuation and one of the forestry workers - Mr. Campbell - came in, very worried. He had been on guard on the Banksiadale-Dwellingup Road and his wife had gone down to take a cup of tea to him. He saw her disappear into a fire crossing the road and was worried as to her safety. She was in fact in the hospital and I was speaking to her when Mr. Matthews came in. He was on guard on the road to report the fire risk, I understand.

In your final suggestion you ask whether better organisation would have prevented excessive fatigue with attendant errors of judgment. When you speak of attendant errors of judgment, you may be speaking of this information you were given by the Forestry officers?---In one respect, yes.

Do you know of any other errors of judgment that were made?---No; this is the one that concerned me.

As a medical man, would you give me some idea of how much rest you think it would be reasonable -- that a man needed for him to retain reasonable efficiency?---It depends on whether he is doing manual work or physical work.

Let us take physical work first?---I should doubt very much whether a man could stand up to more than 12 hours a day for a period of 10 days.

Very often, in a fire, if a man isn't working at his top, he has the opportunity of resting at periods when he is strolling along the road, or just watching. I was thinking that a limit could be put on the time he should have to sleep?---I should say that if he is doing manual work he requires seven hours of sleep at night for this length of period.

What about the man on clerical work: sitting at the telephone, dictating messages, and transmitting orders?---This is a matter of debate, but I would say again six hours per day.

I appreciate it varies with the individual; I was just seeking your opinion?---I would, however, add -- this is only hearsay evidence -- one patient was brought in with a damaged toe, and the driver of the vehicle said that the firefighters in the forest were so tired they didn't know where they were trying to beat the fire, because they didn't know where it was; they could be beating in the wrong direction altogether. They were so tired on their feet that they didn't know what was happening.

That is hearsay evidence. Is there anything else, that I haven't brought out by questioning, which you think you should tell the Commission which would be of assistance? What about the people who came out of

the fire for treatment to their eyes: is there anything that could have been done to avoid them suffering in that way? Do you know if they wore goggles?---I think those who wore sunglasses benefited. I got that impression. Several of the men were wearing sunglasses and they did seem to escape; but again, a man wearing glasses might be working double the distance away from the intense heat to a man with damaged eyes. I am not in a position to judge. Glasses will obviously protect from infra red heat, which is really what we are worried about.

Did you have occasion to treat people for damaged eyes, or was that done by first aid people?---I saw about 150 or 200 patients.

If that could be prevented, it would be of assistance to improving the efficiency of the firefighter. Is there anything else you wish to tell the Commission?---This is rather a difficult point. I have noticed -- I have talked to a lot of people since this fire. I am sure a lot of people will not come forward to give evidence for two reasons: (1), those connected with the Forests Department will be disinclined to; and (2), the people in the town -- shopkeepers -- one I spoke to yesterday, who I would rather not speak of by name - when I asked him, "Will you be giving evidence?" he said, "No, my business is in a precarious position; if I go and antagonise the Forests Department it would tip the scales"; and he wasn't coming on that scale. Obviously, in this case, the Forests Department is coming under some fire - I think that is fairly obvious; but whether you will get balanced evidence or not, I am not prepared to say. That is your problem.

If I thought there was anybody who could give useful evidence to the Commission, the Commission has the power to summons them to appear. I do not think anything is going to be gained by recriminations, in any

case. What we want is evidence of what took place at the fire, as factual matter, with any suggestions anybody might have, who saw it happen, as to how it can be avoided so that we can improve the measures which will be taken in the future?---In that case, the only measures I can think of are in relation to the evidence I have given.

THE COMMISSIONER: Thank you, Doctor.

(The witness retired.)

ARTHUR GEORGE HEPPINGSTONE,
Retired Pastoralist,
99 Mill Point Road, South Perth,
Sworn and examined:

BY THE COMMISSIONER: What is your full name and address?---Arthur George Heppingstone, and my address is 99 Mill Point Road, South Perth.

What is your occupation?---I am a Retired Pastoralist.

You have prepared a statement of evidence for the Commission; would you read it, please?---Yes.

> In 1829 when the first settlers came to West Australia they were amazed at the great forests of timber they had located. They became friendly with the natives right away and the natives of the South-West were quite an intelligent people.
>
> They told our people my grandfather among them, that they burnt the country every second year and had no trouble at all and no destruction by fire. Their reason was to fatten their kangaroos and the opossums which lived in the hollows of the trees at the top and they were in countless thousands. Their forest fires just crept along the ground quietly, burnt up the leaves and the rubbish and gave the ashes that meant manure for the trees. The first settlers did as the natives advised with the same good result no serious fires and no worry on that score at all.

I might say in passing: Of course, there were very few people -- about 200 or 300 people here. At this spot they are right in the centre of the forest. They had no chance at all when they realised the density of the forest, of doing anything. They could see that to cope with it -- they got established almost straight away, and the natives up in that part are of quite good mentality; they picked up the language very quickly - -

THE COMMISSIONER: I think it would be better if you read your evidence first.

THE WITNESS: Yes.

> The forest was in beautiful condition when they arrived very rarely to see a tree even burnt. They did this for the first 60 years and the whole country population in the month of March always kept it burnt up to save their farming properties and also for bush feed for their cattle. Years later the Forestry Department came into being and they had a different policy which has lost the nation millions of tons of good timber and their present policy unless altered will spell ruin to the balance of our forests.

About 1912 I had 15,000 acres of forest country on lease from the Forestry Department and I tried to get our Conservator of Forests to let me burn some of it in the early part of the summer but did not get permission but he did admit that control burning had a lot in its favour, the Controller at that time was Mr. Lane Poole a splendid man no doubt with softwoods and a really good chap. The acting Conservator before him, Hugh Brockman, was a great believer in burning off about March and was one of early pioneer families and had seen the result of the burning policy.

It would be wrong to criticise a policy unless there is a way out of it and I now suggest that all the dirty forests be burnt about the end of September where possible and the main karri forest about a month later in October. Of course the time of burning will depend on an early or late season. There is so much moisture then in the undergrowth that the heat of the fire will do little harm if any and the same method employed till all our forests are clean.

This will result in the saving of thousands of pounds yearly to the Forestry Department and a real boom to the whole of the settlers in the South-West.

I was a contractor with the South African Government for many years and also had large contracts with the Commonwealth Government for poles and piles. If called to give evidence on oath, if necessary I can do a lot for my native country.

BY THE COMMISSIONER: When you say you were a contractor with the South African Government, you mean you were a contractor in Western Australia supplying poles and piles for shipment to South Africa?---No; I was supplying sleepers for South Africa. I supplied poles and piles for the whole of the Commonwealth -- South Australia, Victoria, and other parts that sent for them.

From Western Australia?---Yes, all in Western Australia.

The main basis of the evidence you are giving is that there is evidence that in the very early days the natives had burnt the forests as frequently as they could?---For hundreds of years, without doubt.

You got that evidence from your grandfather?---Yes.

He told you himself?---I am 72 years of age and I have been burning forests from the time I was 15.

But I am speaking of what the natives used to do?---Yes.

I am trying to get what evidence there is that the natives actually did that. The evidence you have given came down from your grandfather; you did not speak to the natives yourself?---Yes, I did. An old native called Bobby used to come and burn off in my lifetime at Brunswick Junction. We had a lot of grazing country east of Brunswick Junction, and also some at Brunswick Junction, and he used to come up and help us burn. He used to go miles away and start fires.

Is it not possible that the natives in the early days used to concentrate their burning on the blackboy flats and grassy glades where they would get a ready growth of grass, rather than in the jarrah forest?---No. They wanted to keep it clean to kill snakes and clean out all the rubbish. I could take 1,000 sheep from Brunswick to a place we had north-east of Collie, just with a dog, but today you could take 20 men and 20 dogs and you could not get through. It is a forest of leaves and rubbish, and they could not get through.

What sort of country was that? Was it not fairly open forest from the point of view of density of the trees? When the early settlers came here, as I envisage it, they landed at Perth and Bunbury and others parts on the coastal strip where the forest was rather of a scrubby, open type. The forest was not actually what you would say was the best of jarrah?---No.

What about Brunswick Junction?---The best in the world. A lot went 80 loads to the acre. We used to burn that country there and take 1,000 or 2,000 sheep there in the summertime because when it was burned there was beautiful feed. If you burn a jarrah forest, the first year after the burn the feed is green right through the summer no matter how hot the summer.

They burned the whole of the forests without control at all. They just lit it and let it go?---Yes. They were all scattered. Our people went to Albany in no time at all, and they were doing the same thing everywhere.

At what time of the year die they burn? Did they make a practice of burning at any particular time?---I would say they would burn in the summer time at any time. There was no danger at all. I have burned thousands of times myself. We never had any trouble with fire. It would creep slowly along the ground. I could get 20 or 30 people to prove what I say is true.

I have no doubt the early settlers burned the country as frequently as they could, because it gave them

grass and fresh food. But I am more interested in what the natives did. I find it difficult to imagine the natives deliberately went around burning off all the forest country. I would not expect them to be interested in the real forest country?---They got their living in that. They were there right through to Manjimup, where the best forests are, and back to Bridgetown. It was full of natives. In those days there was just not a few natives, but many of them. In my time I can remember seeing at Brunswick Junction, camped on the river, easily 300 or 400 natives in one lot.

Would the Brunswick Junction country grow a fair sort of grass?---Yes, very good grass.

So it would be good hunting country for the natives?---Yes.

And they would concentrate in places like that?---Yes.

What about a district like Dwellingup?---That was a jolly good district. I remember when they used to get hundreds of kangaroos there. The natives would go down to Dwellingup. It was good hunting country. I think you can safely say that they burned the whole of the forests of Western Australia. I do not say one tribe, but all different tribes. They would burn it to keep the country clean so that the opossums would live. There would not be a possum alive in that fire now. In those days you could see them up the trees in hundreds. Anywhere you went you would see possums in the trees at night. They were their food.

What was their food?---The possums. They lived at the tops of the trees. They knew that if the forest got very thick, they would be in danger. They had a lot of commonsense. I have found natives on the stations

that we have and had, with a lot of solid bush sense -- more than the white men, very often. Another thing I notice is that where the country has been burnt we have beautiful springs. Today, with no burning, the springs have dried right up. The scrub and stuff is so thick and dense it is taking the whole of the moisture that comes from the heavens. There are all these rushes, and runners up the trees, and undergrowth and useless rubbish being fed with the water.

How old would you have been in the days to which you are thinking back?---60 years ago.

How old are you now?---71.

You were fairly young -- about 11 years of age?---Yes.

Don't you think one's recollections, when one was as young as that --?---I can remember; and I can tell you things that happened long before then, when I was six or seven years of age. I remember the first time I ever rode a horse.

Don't you think the recollection of what things looked like 60 years ago may not be a true reflection of how they would appear today at your present age?---When one is born in the bush you get used to the bush and you get to love it and you know what the bush is doing. I realise that in those days the cleaner the trees the bigger they would grow. For instance, the ashes that come from the fire supply manure to make the tree grow, and the rays of the sun striking down on the roots fertilise the tree. That is why it was so good in those days.

But there are lots of forests in the world where they do not burn, and they still grow all right?---It is all right with pine forests; they are soft, but if ours are not burned they will not grow half as fast. I am sure of that.

You think that applies to the karri as well as the jarrah?---Yes; and to wandoo, too.

You could not speak of the other States, of course?---Not at all.

As far as hardwoods are concerned, in country such as Europe, they never burn their hardwood oak forests there?---No, I have been to France, and they would not want to burn their hardwoods there; it would be silly to burn.

What you want to say is that eucalypts particularly, benefit from these burns?---Yes, I can take you to a place they call the "iron pot" which is three miles from Brunswick Junction, and I can show you trees there that have been growing for 100 years, and you will not find the blackburn on them. You used to burn the fields in those days.

You say that the trees are not burnt?---No. The few trees that are around Collie would not show one in a hundred that had been burnt in the early days. The undergrowth was burnt every year. At that time there was a tribe called the Williams natives and they used to go down there and live there during the summertime, and they would burn in front of them as they went along. The natives always moved down west because of the running gullies and the springs that were down there.

You mean they moved down south?---No, they moved down the west towards the coast and they stopped there during the whole of the summer and go away about June.

It was a bit cooler for them close to the coast?---Yes, and they had running springs and deep gullies. The place they went to was east of Mornington Mills; that was where they used to go. The timber was not as good as it was further west. That was the best forest we had in Western Australia; that is, where the Mornington Mills were. It was jarrah country and particularly thick country, and that was always burnt through because the settlers would all move their stock there in summertime. There would be 400 to 500 cattle there in the forest country. The people were in Benger and the country roundabout. I think, myself, that we have conclusive proof

that the natives burnt that country without any trouble and left the forest for the next generation. One would conclude that that would be the proper thing to do.

I have quite an open mind on the subject, but I am just wondering that many of our native scrubby species require fire to make the seeds germinate, such as the wattles. If there were no fire in the jarrah bush in the old days it is quite possible that you have very little undergrowth?---You would have the undergrowth because it is very moist country. Then the lichens and the blackboys grow up and make a real forest and it does not get burnt. However, if one burnt that out one gets grass coming up about a foot high.

I realise that the settlers used to burn that country because it did produce growth for their cattle?---When there is a real forest fire down there now you could take all the fire brigades from Perth and the whole of Western Australia and they would not get within 400 yards of it.

But they did not have those sort of fires in the days you are speaking about?---No, they did not want them.

That is the whole purport of your evidence; that if the forest was burnt frequently those large fires do not occur?---Yes, exactly.

(The witness retired)

THE COMMISSION ADJOURNED.

A.G. HEPPINGSTONE
18/5/61.

MONDAY, the 22nd MAY, 1961

EDWARD CHARLES ATKINS,
Farmer,
North Dandalup, sworn and examined:

BY THE COMMISSIONER: You are the Vice-Chairman of the Murray Road Board?---Yes.

You have prepared some evidence for this Commission. Will you read it?---It is as follows:-

MURRAY ROAD BOARD

Dwellingup Bush Fire

The following is a summary of this fire, covering the period from Friday, 20th January, 1961, to Wednesday, 25th January, 1961.

At 11 p.m. on Friday, 20th January, 1961, a report was received from Mr. B. Beggs, Forestry Department, Dwellingup, stating that a dangerous fire was burning in Forest country some miles from Dwellingup, in a general northerly direction. He requested assistance from the Board, if possible. This was agreed to, and a board truck was sent to Collie to transport a Forestry Department bulldozer to Dwellingup.

Board equipment and employees were also sent to Dwellingup early Saturday morning.

At 7 a.m. Saturday, 21st January, 1961, a fire was reported on Haynes' property on the fringe of the Forestry country some 8 miles north-east of Pinjarra. The local Adelaide Road brigade was in attendance and further brigades were called upon to assist.

It was also reported that a fire was burning in Forestry land east of North Dandalup. The North Dandalup brigade had been in attendance since late on Friday, 20th January.

The south Dandalup brigade was also attending a fire in hill country behind Fairbridge, between Whittakers Hill (North Dandalup) and the Adelaide Road area. These fires appear to have originated from the general fire in the Forestry area.

During Saturday morning the control officers in the areas, North Dandalup to Adelaide Road, agreed to back burn along the foothills to prevent a further spread. This break was also continued along the northern side of the South Dandalup River from the Adelaide Road area to Meelon.

On Sunday, 22nd January, the fire appeared to be causing concern in the Marrinup (Woolheads property) area and some road board plant was sent to assist. Local brigades were also attending and it is understood that the Forestry were also present.

On Monday, 23rd January, at 6.20 a.m. assistance was requested at Keysbrook, as the fire had spread from North Dandalup in hill country and was threatening to cross the main south-western highway near Keysbrook. Some board plant and a number of volunteers were directed to that point.

A further request for assistance was also received from control officers in the Meelon area (Oakley Road section) at 7 a.m. and various brigades and volunteers were directed to attend. Board graders had been preparing breaks in this area during the night and continued during the morning.

At 11.30 a.m. request from North Dandalup was received for graders. These were despatched as soon as contact could be made with drivers. Breaks were provided and graders returned.

During Tuesday, 24th January, the fire appeared to have been held at all sections in which the brigades were concerned; however late Tuesday conditions deteriorated in the Dwellingup area due to strong north-east winds. Reports indicated that Dwellingup was threatened.

It was later confirmed that the fire had passed through Dwellingup and had also crossed the main Pinjarra-Dwellingup road, between Meelon and Dwellingup, and was spreading through forest country to foothills towards East Coolup and Waroona. On Wednesday, 25th January, at 2.30 a.m. it was reported that the fire had reached lower slopes of hills between Meelon and Murray River (near McKays).

As the other sectors appeared to be reasonably safe all equipment and men were directed to the Meelon area where a headquarters was in operation at Mr. Salter's house.

The control officers at Meelon now agreed to burn a break in a general north-south line from near Meelon to Murray River (McKays).

This was proceeded with during Wednesday and completed by approximately 6 p.m. Some rain fell soon after 6 p.m. and the position was considered safe.

Action was taken early Wednesday to clear fallen trees from the Dwellingup Road to enable the evacuation of residents from Dwellingup. Urgent attention was given to burnt-out culverts.

This report generally covers the area adjoining farming land along the hill country which joins the Forestry land.

The board's plant and employees were engaged more or less continuously during this period and all brigades in the district were in attendance for long periods at the scene of one fire or another.

Assistance was readily forthcoming from other districts and many volunteers rendered valuable service.

Cause:

The main cause of this fire is considered to have been due to the lack of protective burning by the Forestry Department over a period of some 20 years or more, but the policy has been revised during the last seven years, when more protective burning within the Forestry areas has been carried out.

Recommendations:

1. A more vigorous policy of controlled burning by the Forestry Department. This is considered useless if pockets are left. (It is understood that the Forestry Department have the intention to provide an 18 ft. roadway in hill country along the western fringe of Forestry area adjoining farm land). Particular attention should be given to protective burning by the Forestry between this road and western farm land in co-operation with adjoining farmers.
2. Better liaison between bush fire officers and Forestry officers.

   (Forestry officials have suggested field days to assist local knowledge of the scarp country and for the supply of marked lithos).
3. The use of supering planes, fitted with radio, for large fires, for aerial reconnaissance.
4. The use of radio for communication is considered to be an advantage with equipment supplied from a central pool.
5. Provision of substantial breaks around all mill establishments, within Forestry area. Suitable timber could be used and the remainder cleared.

I would like to find out to what extent you were associated with the actual operations of this fire. Are you an official under the Bush Fires Act, Fire Control Officer, or a member of a Bush Fire brigade?---No, I am only a member of the North Dandalup brigade.

That is what I meant. Your actual association with this fire was limited to a particular area?---It was limited to the North Dandalup area on Friday or Saturday, Sunday or Monday or Tuesday. Wednesday I went to the road board office and assisted the secretary there by ringing up the Main Roads to see if we could get relief drivers for our bulldozers and graders. I also rang the Bush Fires Board to see if I could obtain assistance with volunteers. I stayed until Wednesday night till the rains came.

This report has been compiled from your own knowledge and reports from other officers?---Yes.

In this report you say that at 11 pm on Friday, 20th January, 1961, a report was received from Mr. D. Beggs, Forestry Department, Dwellingup. I think there must be some error in the name because Mr. Beggs was not supposed to be in the district at that time - he was supposed to be at Manjimup?---I am sure it was Mr. Beggs. When he arrived at Dwellingup he rang the road board and asked the road board to send trucks to Collie.

Did you actually receive the message yourself?---No, the secretary of the road board received the message.

He could be wrong -- he could have made a mistake as regards the name. Mr. Beggs did not get to Dwellingup until the next day as far as I know?---It could have been a forestry officer from Dwellingup.

Yes; but it is not important. When you say the fire was burning in forest country some miles from Dwellingup in a northerly direction, was the fire travelling in a general northerly direction?---It was travelling in a general southerly direction from Dandalup.

What distance does the main road go through the Murray Road Board area from north to south?---I think it is about 30 miles.

How many brigades have you in the road board area?---I could not reply accurately offhand.

Would you know how many men are enrolled as members of bush fire brigades?---In reply to that I would say probably 10 brigades averaging 10 members.

Can you tell me how many of these brigades are on the eastern side of the main road?---I can tell you what is on the eastern side of the main road -- the North Dandalup brigade; the South Dandalup brigade; the Adelaide Road brigade; and the Meelon brigade.

And most of these brigades, I think, are confined to the country between the main road and the foothills?---Generally, with the exception of North Dandalup brigade where I think the members are about half-and-half.

You say in the third paragraph that at 7 am, Saturday, 21st January, a fire was reported on Haynes' property on the fringe of the forestry country some eight miles north-east of Pinjarra. Over the page in referring to this fire and two others you say, "These fires appear to have originated from the general fire in the forestry area". Actually, we have been told that that fire on Haynes' property came from a lightning strike?---It is difficult to determine if there was one fire or several. In my opinion, from my observation, I think it was one fire. It is difficult to find out where they were.

I understand there was a lot of confusion as to where the fires were at the time. You say on page 2, paragraph 4, "On Monday, 23rd January, at 6.20 am assistance was requested at Keysbrook, as the fire had spread from North Dandalup in hill country and was threatening to cross the main south-western highway near Keysbrook". Was that the fire coming out of the forest country or was it the backburn?---The fire was coming

E.C. ATKINS,
22/5/61.

out of the forest country. As one of these reports shows, on the Sunday night we did endeavour to burn between Sharp's and Rowley's, and as the forestry had burnt that in the Spring we could not get a backburn. The fire came in from further up.

In the second paragraph you say, "This break was also continued along the northern side of the South Dandalup river from the Adelaide road area to Meelon". Meelon is on the south side of the South Dandalup river, is it not? Should that not read "southern side"?---It should read "southern".

When they lit that backburn along the foothills what action did they take to make sure what the country was like between the backburn and the fire?---That is covered in some of the reports. Before we commenced to backburn in the North Dandalup area there were fires burning around Whittaker's Mill. We sent word up we did intend to backburn and endeavour to keep Whittaker's road open. We could not pull them out because they were trying to protect homes and pastures in the vicinity of Whittaker's old townsite.

In the last paragraph on page 2 you say, "During Tuesday, 24th January, the fire appeared to have been held at all sections in which the brigades were concerned. However, late Tuesday conditions deteriorated in the Dwellingup area due to strong north-east winds. The winds were blowing from the north to the north-west from about 11 am onwards, but they may have changed again in the evening?---Whilst we have said north-east winds here, when you get over the escarpment area, the wind along that front, whilst it may be said north-west, it was generally north north-east. That was the opinion of the officers.

On page 3 you say, "It was later confirmed that the fire had passed through Dwellingup and had also crossed the main Dwellingup-Pinjarra road, between Meelon and Dwellingup, and was spreading through forest country to foothills towards East Coolup and Waroona. On Wednesday, 25th January, at 2.30 am, it was reported that the fire had reached lower slopes of hills between Meelon and Murray River." Do you know if that report was correct?---Yes, I understand it is correct.

When you say that it crossed the main Pinjarra-Dwellingup Road between Meelon and Dwellingup, and was spreading through forestry country to foothills towards East Coolup and Waroona, do you know the nature of the country at that time and the rate at which it was spreading?---I do not know the rate at which it was spreading, but the nature of the country was very rugged.

Do you know whether it had been burnt in the spring or recently?---I do not think it was burnt in the spring but when they did last burn, I do not know.

In the third last paragraph you say that the control officers at Meelon now agreed to burn a break in a general north-south line from near Meelon to Murray River. Can you tell me who those control officers were?---Yes. Mr. Salter would be the actual control officer there and he had assistance from other brigade officers.

You say he was actually in charge?---He was in charge of that section. It was practically in his brigade area.

There has been some question as to whether that back burn was really necessary on account of the nature of the country in front of the fire?---I would consider, with the weather the way it was, that it was necessary.

As it turned out, they did not join up, did they?---I understand that it did not at the bottom end.

But the action was taken in view of the weather forecasts?---They had a big bearing on it.

You had reports of easterly winds and you lit the fire before rain was forecast?---I was in the road board office on the Wednesday and until the rain actually started in Pinjarra, the weather forecasts were that rain was coming, but until it actually rained it was still a high wind.

What time did it rain in Pinjarra?---I say here at six o'clock. It might be a little after that.

It was a little earlier around Dwellingup?---Yes. I rang the Bush Fires Board at 5.30 for more volunteers if practicable or possible. They co-operated and a report was put on the air, but no sooner had this been done when it was stated that it was raining. It had not rained at Pinjarra then.

There were still easterly winds blowing when the fire was lit?---Yes.

You refer to them clearing fallen trees in the Dwellingup area and giving attention to culverts. Were they burnt out in the main fire or in the backburn?---In the main fire.

You speak of the lack of protective burning by the Forests Department over the last 20 years. That is prior to the last seven years, I take it?---Yes. I mean that we think that in the last seven years they have endeavoured, with the changed policy, to do more protective burning, but the fact is that they have not caught up with it.

So apparently you people think they would have to do considerably more per annum if they are going to catch up?---Definitely.

How often can you burn down there?---I know from my own experience as I had a little hill country there that if done every three years it would be too severe in the forestry, but a slow protective fire could be burnt after two years.

Dealing with your recommendations you say that a more vigorous policy of controlled burning by the Forests Department is necessary but would be useless if pockets are left. Don't you think that that word "useless" is a little severe? If pockets were left would they be so serious as to make the whole thing useless?---Overall it would not, but it would if a pocket of some intensity or quantity were left and a fire got into it.

It could jump?---I think possibly that "a section" would have been better than the use of the word "pockets".

I still do not understand quite what you mean. What is the danger? Supposing you did have a section unburnt and a lightning fire started in the middle of it, what are you visualising?---I will put it this way: We will

assume that they burn and leave a pocket and lightning came on the western perimeter of the forestry with an easterly wind. It would spring back into the pasture land.

I appreciate that if it is on the western perimeter; but if these pockets were scattered throughout the forestry on the inside and the whole of the perimeter was burnt back for some distance that would be all right. After all these pockets are sometimes desirable as in the case of research?---I think possibly that if it was well in the forestry it would be all right.

So the recommendation could be qualified a little?---Yes.

How definite is the information you have in regard to the Forests Department's intention to provide an 18 ft. roadway in hill country along the western fringe? Have you had definite advice from the Conservator of Forests?---Not from him but from his officers. A recommendation to that effect has gone to the Conservator.

You have not had it officially?---No. It is only what we have been told.

When you say "adjoining farm land" it would not be practical to put it exactly adjoining farm land but would have to go distances at times?---Yes. You have to allow for the nature of the country.

They have burnt that country pretty well on the western boundary for many years?---Only in spots. They have been rather reluctant to burn because whilst it may be suitable to burn a break around the perimeter, if the fire got into heavy timber, they would be in trouble.

Even during that 20 years to which you refer, I think they were burning strips down that western perimeter?---Yes, but only in a very small way.

How wide is each burn?---I do not know. I think the forestry called them sections and they endeavoured

to burn these sections out, but they have not got around to doing it. This has probably been due to lack of staff, but I do not really know the reason.

The idea was at one time to burn a section five or 10 chains wide, the next year to burn another section five or 10 chains wide, and perhaps the following year another section. Then they would go back to the first one again. You do not think they do that to any extent?---No, they have not done that. It is possible that it is their policy, but it has not been carried out.

I have put it very roughly. Obviously they cannot burn any particular width in any particular place?---I realise that, but whilst that may be their policy, they have not been doing it.

You had a look at the country yourself or are you relying on hearsay?---No, I have seen the country and been through it. Actually I live on land adjoining the forestry.

What I was wondering was whether as a result of their efforts to get a more extensive spring burn in their country, they may have, in recent years, neglected that edge a little more than before?---No, I do not think it is that. They have endeavoured, but they have only done such small sections that it is not sufficient to cover the area.

You say that particular attention should be given to protective burning by the Forestry between this road and western farm land in co-operation with adjoining farmers. Do you know if they have made any efforts in the past to secure co-operation from the farmers or, on the other hand, if the farmers have sought co-operation from the Forestry Department to get that country burnt?---As I said, I adjoin the Forestry. I have, in most cases, sought their co-operation and received it. I think that in some cases personalities may come into it; co-operation has been lacking, possibly in both ways. I would say that the Forestry Department usually co-operates if you can let them know in plenty of time. I know of some people who have not had the co-operation from the Forestry Department, but naturally that is not my worry.

No. I was thinking of some statements that have been made - one or two at least - to the effect that the Forestry Department have not allowed farmers to spring-burn. As far as I know, the Forestry Department cannot stop a farmer spring-burning on his own land. His own local fire controller gives him a permit for that, unless there is the likelihood of danger?---If you live within 2 miles of the Forestry you must get permission from the Forestry Department to burn.

Have you had any difficulty in that direction?---Personally? Yes. Last year, about 15th March twelve months ago, I considered it was suitable to burn. They didn't, and they held me up until the rains came, and I couldn't get a permit to burn. I think that created a fire hazard.

What was the date?---It was after the burning season commenced; it could have been the 25th March.

Did they say why?---I couldn't contain it in my own property. In hill country it is impracticable to plough breaks. We endeavour to do what we can. We realise it could get into the forestry. In the past they have let it get in and it was checked by their spring-burning.

I see. Do you think that co-operation could be achieved in the future; that the settlers around there will cooperate?---I think there must be more co-operation than in the past, with the advent of aerial supering. I think that a lot of the hill country that was considered useless as grazing country is now coming into high production.

Has the road board done anything about organising the settlers in those foot hills, compared with the situation before the fire?---Yes; with the Murray Road Board, the settlers are endeavouring to form their own brigade in the hills.

Has the board appointed new fire control officers to help them in that direction?---They have had them gazetted; I am sure of that. They are in the process of forming a brigade up there. Our brigade captain is a man who has lived in the Forestry all his life and worked in the forest while a settler. This man was recently killed falling a tree.

You speak of the use of supering 'planes fitted with radio for large fires for the purpose of aerial reconnaissance. Did the road board use any 'planes that you know of in connection with that fire?---At the time we didn't realise that the later 'planes, the Piper Pawnees, are fitted with aerial base transceivers. At the time we understood they were just Tiger Moths and not connected with transceivers. We have learned since the fire that there are transceivers in their 'planes .

The Tiger Moths?---No, the Piper Pawnees.

Is the road board taking any action to achieve co-operation with this, in the event of fires occurring again?---The road board has not made a direct approach. We are trusting that the Bush Fires Board will take that up on our behalf and see if they can make some arrangement.

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Do you expect those people to charge, when a fire is on?---It would not be unreasonable to expect them to charge.

They are defending their own livelihood, in a way?---I think it would be a case of the elements coming into it as to whether they should be volunteers or paid servants. It all depends on individuals, and what properties they have in the area. It all comes into it.

Some people maintain that where they have a stake in the area it would be reasonable for them to volunteer in circumstances like that?---I wouldn't know. In my suggestion, I would naturally expect they would charter a 'plane.

Were there any operating in the district at the time of the fire?---I understand the Forestry Department had one.

I mean, any supering 'planes?---No. It was too early for us.

Why do you suggest that radio equipment should be supplied from a central pool? Why not let the road board get their own?---I understand the road board does not want that. It would be the maintenance of it and the question of experienced operators. Our secretary is an Ex-Air Force radio operator and he tells me that unless you get technicians to keep the 'planes up and maintain them, they deteriorate very quickly. When you get them out of the cupboard, as it were, they have to be serviced and checked over. He pointed out to me that you can't pick one up and start transmitting with it; you might do something wrong. I think that possibly a pool equipment station might be set up in Perth. It is only an hour and a quarter's run in a car. The pool should be properly equipped and operated. Someone giving instruction in the operation would be much more suitable than having our own.

What was visualised -- that the Bush Fires Board would supply those from its own funds, or that the road

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boards would participate in the expenditure?---Nothing has actually been discussed. If the Bush Fires Board could not get the full amount of revenue to purchase them, possibly the local authorities could help. There might be perhaps one or two road boards which would not be prepared to co-operate in purchasing them.

If one road board stood out, it would be the one that required them on the first occasion?---It might be.

You speak of the provision of substantial breaks around all mill settlements around the forestry area?---Yes.

What type of break were you thinking of, and how wide?---My own visualisation of that was a break of possibly 5 chains, cleared of everything, of all trees and debris. You get a top fire like they had this year, and possibly towns, or houses, would still have burned. It is practically impossible for those mill towns to survive with the way the timber is allowed to grow right up to the back doors. .

How would you keep them clear; would you brush them every year?--Possibly spring-burn them. The grass will grow, and it could be treated as an ordinary grass fire.

But a lot of that jarrah country would not grow grass?--No; if you had grass it wouldn't carry a fire; but where the regrowth did come back, you could just keep it clean.

Do you think that 5 chains would be a reasonable width?--That is only my suggestion. With 5 chains, you can get some sort of protection to burn back from.

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BY THE COMMISSIONER: I realise that you have to put on a figure of some sort?---Yes.

I was wondering whether you would say five chains or 10 chains?---I think that would be up to the Forests Department or the mill concession holders, whoever they may be.

It is a matter of cost more than anything else, of course. I am sure the Forests Department would not mind sacrificing that piece of land, but the cost of burning it off every year, as well as the rest of their forests, could be pretty heavy?---Yes. Near Dwellingup we also have the town of Banksiadale, a railway mill town, and that is in a shocking state. The same thing would happen there if a fire came anywhere near it. I think the initial cost would be the least, as far as bulldozing and cleaning it up is concerned, and after that it would be only a matter of an evening burn around.

Do you think it is reasonable to put that charge against the Forests Department; or should it be put on to the people whose properties are being protected?---That is what I said earlier that if it is a private mill, the milling company concerned could possibly be held responsible. If it is a Government mill, such as Dwellingup, they should share; and at Banksiadale it should be the Railways' responsibility.

Speaking on behalf of your road board, or yourself, have you any ideas on this matter of the enforcement of provision of firebreaks by private people?---I know that the Murray Road Board are very conscious of it. Last year, for the first time, we appointed an inspector after the 30th November to inspect them. We think that is a much better idea than asking the fire brigade captains to let us know at the board. We had this inspector for a fortnight last year, and it is the intention of the board this year to have him for a month.

Who is that?---We appoint an independent inspector.

For a limited period?---Yes; last year for a fortnight, and this year we contemplate employing him for a month. Any recommendations he put in last year, in regard to lack of firebreaks, have been handed on to be dealt with under the Bush Fires Act. Some who had a break which was not quite up to standard were written to and told to put it in order.

What about those who did not take notice of the instructions?---They have been handed on to the board's solicitors for action.

Do you find that generally there is a disinclination on the part of the road board to issue prosecutions?---I do not think so. If ever a report comes in with regard to the lack of a firebreak, or something, the board always takes action.

Do you find the wardens under the Bush Fires Board are of assistance to you in these matters?---Very much so. I should imagine that if our inspector said it was not sufficient and the farmer said it was, we could ask the warden to be the arbitrator.

These recommendations are those of your road Board. As far as you are personally concerned, have you any other recommendations you would care to suggest that might assist in preventing such disastrous fires in the future, or in assisting to protect life and property?---No. My personal opinions are practically covered in these.

BY MR. McARTHUR: What is the farmer's main agricultural reason for burning off such country as your hill property?---To clean it up: to get rid of the undergrowth.

The fallen and standing timber?---Mainly the undergrowth, the prickly bushes and so on so that you can graze on it.

Is there any reason why that burning cannot be done after the first rains? I think you realise it is a fairly risky business before the rains come at the end of the summer period?---Last year--not this year--we could not burn after the first rains. Once the rain started it kept on, and the country got too damp to burn.

Last year would have been a fairly exceptional type of year?---Yes. As I pointed out, the fact that there was no burning last year created a bigger hazard for this year.

But that might have been only a one in 10 years' occurrence. You do not frequently get such heavy cyclonic rains in the middle of March?---No; but I do not think it was any better this year. I know one or two farmers further along the road were intending to burn off, but they did not get a burn.

But you could have burnt easily this month or last month?---No, not in that type of country. You might get a little patch burn, but not a nice fire to be of any benefit. You need a reasonably hot fire.

BY MR. HALE: On the question of wireless equipment, do you not think that if your board had some sets, operators could be trained in their use?---I am not familiar with the technicalities of transceivers, or of radio communications at all. If it was practicable, possibly the board would have no objection. But I have understood, in on or two directions, it is impracticable to do that.

I am thinking that while it may be possible to have a pool of equipment in Perth, it may not be possible to provide enough operators for those sets, and that some may have to be trained locally?---Perhaps. When you have a bush fire demonstration or camp at Point Walter each year, possibly the Murray Road Board could send two or three fire officers up, and one of the subjects to be discussed could be the operation of radio equipment.

Those were the lines I was thinking of?---Possibly a radio school could be part and parcel of your bush fire's school here every year.

BY THE CHAIRMAN: You referred to the assistance given to you by the Bush Fires Board through its warden, and also to the possibility of radio equipment being provided and operators being trained.

Are there any other directions in which you think the Bush Fires Board could help, even if it meant going outside their present powers or if it meant additional money?---No. We have had full co-operation from the Bush Fires Board. They have co-operated in every matter we have ever raised with them. I do not think there is much more we could ask them. Possibly if I said they could do with more money, they would agree with me.

I was wondering whether you had had any experience of their inability to help you at times owing to the limited staff they had?---It has never occurred to me.

They have always responded?---That is so. I have never head any of the executive officers say they were held up in any matter.

There are other gentlemen here who have put in reports which are useful for a detailed study of the situation. I do not know that we will need to call them but if we visit the Pinjarra district could we meet these gentlemen and discuss any details with them that we may want to clear up?---I am quite sure they will be more than helpful.

Would the road board be in a position to make a room available for a hearing such as that?---Yes.

I understand there is a Court House there?---The Police use it as the Police Station is not big enough for their business.

Do you think there would be many other people in that district who would want to give evidence if we did sit there?---I understand there are quite a few endeavouring to give you evidence, over and above the fire officers.

I do not want to spend too much time listening to people giving evidence of the same experiences unless they can contribute usefully to the Commission's knowledge. Otherwise they could waste a lot of time and so could the Commission. However, if the road board could help us in that direction by advising us in

regard to the value of the evidence the witnesses could give, it might help us to decide whether we should hear them, and how many of them we should hear?--I can ascertain that information and pass it on to you.

(The witness retired.)

EDWARD CUNNINGHAM QUICK, Wooroloo,
Farmer, sworn and examined:

BY THE COMMISSIONER: You have prepared a statement of evidence and you have sent us a copy of that evidence. Would you please read it now before the Commission?--Yes. I represent the Wooroloo Branch of the Farmers' Union and we wish to make the following recommendations:-

Re Section (3), subsection (a) of the terms of reference:

(1) That a State authority, such as the Bush Fires Board, employ officers to inspect complaints of failure to carry out fire prevention in those areas where bush fire hazards are high, such inspections to be carried out, chiefly, immediately prior to the 'closed' burning season. All lands to be subject to such inspections, whether privately owned or otherwise and particular attention to be paid by inspectors to control burning of bush outside the closed season and the ploughing of fire breaks wherever possible. Inspectors to recommend prosecutions if they think fit.

This suggestion is made because fire prevention is considered by far the most important aspect of the bush fire menace and the most important aspect of fire prevention is the control burning of bush outside the closed season, whether the bush be on private property, roadsides, reserves, Government or public property, State forest or Crown lands, etc. This aspect of fire prevention has been grossly neglected in the past in the Eastern Hills Districts on both private and public lands.

At present the policing of the Bush Fires Act is left largely to local authorities, who in turn are inclined to rely on the services of volunteer bush fire brigades. Local authorities have not the resources, financial or otherwise, to deal with what has become a national problem and it is most unfair to expect volunteers to undertake work of this nature.

(2) That the above-mentioned authority be empowered to financially assist volunteer bush fire brigades in the purchase of suitable fire-fighting equipment.

Here again this matter has been left to local authorities and brigades. In the case of one brigade in the Eastern Hills districts the local authority is handicapped by the fact that much of its territory embraces State or public lands from which no rates are obtained. The brigade concerned is still without a vehicle and water tank -- essential equipment -- and members are naturally reluctant to offer the use of their own trucks, even if they are suitable. If members provide their own transport to fires and give their services free it is as much as should be expected of them.

A further recommendation has been made that communications of bush fire brigades should be improved by the use of walkie-talkie sets.

Are you a landowner?--Yes.

Could you tell me the location numbers of your holdings?--Off-hand I could not, because there are a lot of them.

Could you give us a description of the country that comes under your immediate charge?--The Wooroloo country is very hilly and is intersected by brooks and streams and rocky outcrops. The timber is chiefly wandoo, jarrah, and in the valley there is a mixture of large numbers of blackboys, red gum, and blackbutt.

I must apologise for my lack of knowledge of Western Australia, but where is Wooroloo?--It is on the main eastern line about 36 miles by rail from Perth.

Have you had any fires in your district this year?--Yes.

Serious ones?--Yes.

What would be the acreage of the largest fire?--About 2,000 acres.

How did that start?--From a stationary petrol engine on a private property. I was the secretary of the local bush fire brigade at the time, and I made a report on the fire to Mr. Sutherland of the Bush Fires Board.

You speak of the Bush Fires Board employing officers as inspectors. This is something additional to the wardens which it already has?--I should think it would have to be, because to send a person on a job like that would entail a fair amount of time. If complaints were received about a district, the suggestion is that the Bush Fires Board, or some such national authority, would send a man to inspect.

How long do you think it would take in your district?--In our road board district it would take a considerable time. When I speak of "district" I mean a district such as Wooroloo district, which would take a few days, I should say.

How many properties would be involved in that?--Private properties?

Yes?--It is difficult to estimate, but I should say about 50.

Then it would not mean a very big charge, comparatively speaking, for the road board to appoint its own inspectors?--In the evidence the suggestion is that public lands should also be inspected and there are a great deal of public properties, such as Crown land, and the land controlled by the Wundowie charcoal iron industry, which runs into thousands of acres. The Wooroloo hospital would also be on about a 3,000-acre property. It would be safe to say that in our district there would be more public lands than private lands.

I appreciate that, but if it were going to take only a few days, the charge would not be very great?--To do the Wooroloo district it would take about a week, but that is only one in the Mundaring Road Board area.

There are 50 or 60 ratepayers and it would not be a big charge for the ratepayers to do that; that is, even for an inspector to come from some other body other than the road board. What do you envisage it would cost the road board?--It would cost about £20 a week.

That is only about 10s. a ratepayer per year, to have that part of the business on which you so rightly place emphasis, looked at?--Yes, but it would be at considerable expense to cover the whole of the road board area.

You mean other districts in the road board have larger areas of Crown land than you have in the Wooroloo district?--There are large areas in the Chidlow district. I cannot speak for the other areas.

Does not Wundowie burn off some of the country over which it has authority?--A little, but not sufficient.

Have you any idea whether they burn it to a plan or whether they burn it over when they have finished their timber operations?--I think there is some plan in the immediate vicinity of Wundowie, but in the vicinity of private properties, farms, pastures, and so on, there is very little evidence of burning.

Is not a lot of the operation on private property?--Not that I know of.

They do take timber from the private property?--Yes, but most of the land is Crown land.

There are some parts in Western Australia where there are considerable areas of Crown land, and you are suggesting it would be a heavy burden for them to burn that. Suppose in these cases a recommendation was made to the Land Board how would you get over the matter of making the Crown land safe? Who would be responsible for the finance for that purpose?--We feel this should be done by an authority such as the Bush Fires Board, and the finance provided by the whole of the State instead of it being left to a few people in the hills area.

You are thinking of the Bush Fires Board or some other Government authority actually doing the work with the co-operation of land holders?--No; you have mentioned Wundowie. Wundowie controls those lands and we submit that in the event of a complaint of their neglecting to make the forests clean and free from the

danger of fire some constituted authority, like the board should send inspectors to inspect the land and the forests and they should be compelled to do some control burning. I am not sure whether one Government department can prosecute another, but this should be carried out.

I do not know of a case that could be dealt with in that way; but what about the ordinary unoccupied Crown land? Who is to do the burning around this if the local adjoining land-holder does not do it?--I am not sure that the private land-holder is allowed to burn Crown land. If he started a fire in May on Crown land and it got out of control he would be in a tight spot.

I think the Bush Fires Act provides for adjoining land-holders to carry out burns on properties adjoining their own?--It would be a big task.

Yes, but who should do it?--Whoever is responsible for the Crown lands.

The Lands Department?--Then the Lands Department should attend to the forests they control.

It is a matter of whether it is practicable for a Government department to have such a huge staff of controlled burners to deal with all the land in that period when you can burn it safely. What is the period?--The period would extend from the 15th March to the middle of October, and during that time the bush, which consists of white gum, is very inflammable, and when it is not raining you can burn breaks. When I say control burning, we are only suggesting breaks of a couple of chains. That is not a big job for a team though it might be a big job for one man.

What is the average rainfall in your district?--It is 30 inches a year.

And you can burn right throughout the winter so long as it does not actually rain?--Yes.

You can burn adequately for firebreaks?--Yes.

Do you visualise firebreaks actually stopping fires, or being used to burn back against inflammable country?--The latter; if there was nobody in attendance the fire would immediately jump the break.

I think your idea of somebody to inspect the condition of the country prior to the fire season is sound enough; planning where firebreaks are to go and reporting it to the road board is also sound, but when it comes to who is to pay for it, you get into some difficulty. You are suggesting it could come out of Consolidated Revenue and not local rates?--That is in effect what I am suggesting. That does not apply to private property. They should be responsible for their burning and ploughing.

What do you think about roadsides adjoining private property? Is there any difficulty about the owner of the adjoining property burning the roadside along his property?--That is a most controversial point. Most of us attend to our own roadsides. I would try to instance a case. For instance, there may be a railway line, and between the railway line and the private property there is a road. As a rule the settler is willing to look after that bush between his property and the road, but when it comes to that part between the road and the railway lines, where quite often a long stretch of bush needs burning, the settler does not feel he should be responsible for that.

Do not the Railway authorities burn up to their own fence?--Yes.

But they do not burn to the road edge?--No, they burn to the edge of their own property.

They would burn to the road edge if you helped them?--Not necessarily. We could burn it if we liked, many farmers contend they should not be held responsible for it. Personally, I attend to my own. I have a lot of roads around my property and I attend to the roads myself, but many farmers feel they should not be responsible for it.

I wonder whether in their own interests it would not be a wise thing for them to do it?--Many of them do, but others feel it should be the responsibility of the local authority or of some other authority.

If it is the local authority land only you will have to pay for it in the rates?--Eventually, yes.

Do you think there is much apathy in your district with the average land-owner with regard to protection from fire?--Quite a lot, particularly in the case of absentee owners.

Some of the absentee owners do the right thing and protect their property?--Some of them do, though I cannot recollect one at the moment.

What do you call an absentee land-owner? He would not be a man who has a manager on his property?--No.

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Most of the properties owned by absentee owners would be undeveloped land?--Mostly virgin bush.

Would it be practical for the local authority to provide the manpower for protective burning around the edges of those properties if the absentee owners were prepared to pay for the service?--I cannot speak for the road board. When the secretary of the Bush Fire Brigade at Wooroloo requested permission to have the properties of absentee owners burnt, that permission has been given. On the other hand, when we asked the road board to do the work, it refused.

The road board gave you the permission?--Yes.

Did anybody pay for the work?--We did it voluntarily.

The proper people to do this work would be the local fire brigade. If the absentee owner is not prepared to assist in the work he could be reasonably expected to subscribe to the cost. Would that meet your difficulty?--Certainly if private property is concerned, the owner should be responsible for the necessary work to be carried out.

Do you think the bush fire brigades would be prepared to carry out this sort of work if they were recompensed for the time they put in?--I cannot speak with certainty, but I doubt if they would. Over the last 12 months, the position regarding our local bush fire brigade was that they felt they were doing the job for which the brigade was formed, if they gave their services and provided their own transport to and from fires.

I would be a bit concerned if you took the responsibility away from the local authorities for protective burning and similar actions necessary to protect private property. Eventually I would expect there would be a greater spirit of apathy on the part of the local inhabitants, who would want to know why the local authority did not look after them right through?--I understand at the moment that local authorities are responsible for prosecutions. We are not contesting as to who should enforce the law in that respect. What we are worried

about is inspection of properties. We feel we should have a person from outside the district.

You are asking for inspectors to be appointed for the purpose of making recommendations to local authorities as to whether controlled burning, or some form of destruction of fire hazards should be carried out. What I am concerned with is who should pay for this work? If you took away from the local people their responsibilities for looking after their own districts, you would be undermining some of that spirit of self-reliance which is so essential for the protection of a district?--The bush fire brigade is willing at all times to go to a fire. Members sign a form to that effect when they join the brigade, but they feel they should not be asked to go along, entirely in a voluntary capacity, and be expected to investigate complaints not only in respect of properties of farmers and along roadsides, but also small properties in the townsite. It is a very unpleasant task. They feel they cannot give the time or afford the money themselves to do this work.

I am puzzled as to why the bush fires brigade should have any objection to carrying out protective burning if they were recompensed?--I am not speaking with certainty but I do not think they would be willing. They would be very reluctant. This is a small district and there would be a large amount of ill-feeling attached to doing anything like that.

If they do not, who will do this work? An alternative is to employ a gang to do it and that will not be very satisfactory because this gang would not have the same interest in protective burning on private properties?--The owner should be compelled to do that work, or else he should pay somebody to do it for him. He should be prosecuted if he does not. Regarding Crown lands I cannot see any other solution. Whoever is responsible for them would have to provide the personnel to carry out the controlled burning.

In your statement you said that the abovementioned authority should be empowered to financially assist volunteer bush fire brigades in the purchase of suitable fire-fighting equipment. I take it that authority is one such as the Bush Fires Board?---Yes.

Do you feel the Bush Fires Board could do the job satisfactorily?---I think so.

You do not advocate the setting up of another authority?---No, either that or some other existing authority.

Do any local authorities you know of assist the bush fire brigades?---Yes.

To what extent?---The Northam Roads Board assisted our local fire brigade at Wooroloo with £25, and the Mundaring Roads Board with £50. The Mundaring Roads Board also provided rakes and knapsack sprays. The Wooroloo brigade has no truck with a tank, and this is very essential for bush fire control. It has a power unit, towards the cost of which the roads boards contributed £75. It has no truck, beyond what is provided in the local brigade At present, the brigade uses drums and the power unit which are carted around by the fire control officer who is a volunteer appointed by the local authority. He does not like the job. Last year he staked a tyre when tending a fire and he did not received any compensation. This being a national problem, the district strongly considers that the nation should do something to assist the prevention of fires.

Does he carry around with him a power pump?---Yes.

And a water tank?---No. We have not been able to raise the money to buy a tank and we use 44-gallon drums instead.

What is the make of the pumper?---We purchased it from Elder Smiths at a cost of £108. I do not remember the make.

So, the local inhabitants had to find £33 of the cost?---Yes.

What sort of a truck were you thinking of? A particularly expensive type?---I understand the Bush Fires Board is prepared to assist the local brigade in the purchase of a four-wheeled drive unit and the price would be in the vicinity of £200. It is prepared to find such a unit, but not to pay for it.

You mean a second-hand truck?---Yes. A four-wheeled drive unit.

£200 seems to be very small?---I understand these are outmoded Army units. That was what I read in "The Fire Fighter".

That is what you want - a four-wheel drive vehicle?---Yes, that is the sort of vehicle.

There are none available in your district?---No.

Is there any form of insurance which provides for recoups to men who have losses sustained in firefighting?---Yes, but not for tyres. Insurance does not cover them.

I thought there might be some form of Government insurance. Suppose a firefighter lost some of his clothes in the fire?---I think that is insured. If he gets his hat burned I understand it is covered.

If his truck were burned it would not be?---I think if he gets his truck burned it is covered, but not tyres, which are the biggest wear of all.

Does the Forests Department operate in your district at all?---They come to our boundary.

How do you find their work on protective burning? Is it satisfactory so far as the people in your district are concerned?---I have not examined it lately, but so far as helping with fires, I have nothing but thanks for the Forestry Department, who have been most helpful. I cannot speak for protective burning. It does not come within our district.

They do not hesitate to come from the forest to help in your district?---They come whenever asked.

What do you think would form a reasonable brigade unit? How many men for a start?---To deal with a fire actually broken out?

Yes?---Our opinion is half-a-dozen or a dozen good men with a knowledge of how to deal with fires are far better than a big crowd of volunteers who do not know what to do. A big crowd of volunteers only gets in the way and they are a hazard.

You want a four-wheel-drive truck and a power pump which you have got. You want a tank for water?---Yes.

How many gallons?---400 or 500 gallons.

Then the usual quota of rakes and knapsack sprays?---They are provided by the local authority.

I do not expect you to work out figures, but have you the figure which the equipment for a bushfire brigade should cost?---I would have to go into that.

Do you know that at a conference of South-west local authorities as recently as last April a motion advocating Government assistance to provide fire-fighting equipment was strongly opposed and lost by a considerable margin?---I did not see that.

As far as you know, you were not represented?---No.

Have you any suggestions for an alteration to the Bush Fires Act applicable to your district as far as burning periods go?---There could be one alteration. It is felt the fixation of dates is a little arbitrary and should be left to the local authority or some officer responsible in the district. For instance, in our district it is fixed so that the opening of the burning season commences on the 15th March and I think the closing date is the 15th December. We feel that the 15th December is far too late, particularly as the grass has usually dried off at least a month earlier -- by the middle of November. We feel it is too late and too dangerous. People leave their burning to the last month and the 15th December is too dangerous.

Is it not in the hands of your own local authority to bring that date forward if you consider it too dangerous?---I think they can do that if they wish, but they have never shown any inclination to alter it. I think the suggestion was made to the Board for it to be altered, but nothing was done about it.

That was why I was wondering whether your suggestion that it be left to somebody in the district to alter these dates was wise, even if the man were sound, that may not apply to all districts. Often the man who claims

to know most about bushfire behaviour is not always the best man for the job?---That is so. I would suggest that submissions on date alterations should come from the local fire brigade as the people in control of the local fire brigades have the knowledge and are familiar with local conditions as regards burning off dates.

Your brigade did make representations to the board?---I think we did suggest it be closed earlier.

You appreciate the difficulty is that unless all other districts recommend the same date the local authorities are in a bit of trouble?---Yes.

In regard to communications, it would meet your requirements, perhaps, if the Bush Fires Board had a service of radio equipment which could be taken to a fire when it actually breaks out. Would that meet your requirements for a mode of communication in the way of radio?---I think it would, but I cannot visualise the Bush Fires Board being able to deal with a number of serious outbreaks in the State and a minor outbreak such as a few thousand acres in the Eastern hills and provide sets at a moment's notice.

If you got in touch with them quickly they could probably provide them in a matter of two or three hours?---That would be satisfactory.

Providing your people did not lose any time in asking for them?---It would be necessary to provide an operator as we would not have men experienced in the use of sets at a moment's notice.

A previous witness to you suggested that the Bush Fires Board might consider training operators in your district by running schools for them?---Yes.

Is there anything else you wish to add?---No, that is all.

Did you come along representing your particular road board?---No, not the road board; the branch of the Farmers' Union.

(The witness retired.)

Sitting suspended for lunch.

WALTER HENRY EASTMAN,
Divisional Forest Officer,
40 Adelaide Street, Busselton,
Sworn and examined:

BY THE COMMISSIONER: You have prepared some evidence to place before the Commission?---Yes.

Would you read it please?---Yes, it is as follows:-

Forest Grove-Karridale Fire
2nd March, 1961, to 10th March, 1961

(1) Outline of Statement:

The fire which burnt through Karridale on Friday, 3rd March, 1961, originated in the Forest Grove area.

The following is a report on action taken by the Forests Department in connection with the fire. Reference is also made to other fires in the Margaret River district which were burning at the same time and which affected the Department's action. These were fires originating in the Alexandra Bridge, Nillup, Warner Glen, Rosa Brook, Margaret River Townsite, and Treeton areas.

Finally, a brief outline of the presuppression measures in the area and of the organisation of the Forests Department in the district has been added.

(2) Causes of Fire:

All, except the Margaret River Townsite fire, were escapes from private owners' burning off operations.

The Forest Grove-Karridale fire originated in Location 2760, the southern half of which was lit on Monday, 27th February, 1961. No notice of intention to burn had been received by the Forests Department. This burn escaped into the neighbouring timber Reserve 72/25, to the west, during the afternoon of 1st March, 1961.

(3) Summary of Forests Department Action, 2nd March to 7th March:

Thursday, 2nd March

First action, following a reconnaissance by the Forester in Charge at 0400 hours, was an attempt to contain the southern movement of the fire in Reserve 72/25 along an east-west track marked (A) on the attached plan. The westward movement was temporarily left as, in this direction, it was running into a belt of country, varying between 40 and 80 chains in depth, which had been burnt in Spring, 1960.

The fire broke from this attempt at control at approximately 0900 hours and also from a similar attempt along the road marked (B) at 1100 hours.

During the afternoon, attempts were made to control the southward movement in private property blocks to the south of Reserve 72.

At approximately 1600 hours the fire crossed into the private property on the western side of the main road (Bussell Highway).

During the night of 2/3 March, 1961, control of this fire on the west of Bussell Highway was attempted by backburning along a recently constructed track sited in a Temporary Reserve (area marked (C) on plan). Difficulty in heading off the westward movement was experienced but eventually the southern line was put through to the old W.A.G.R. line by first light and held.

Friday, 3rd March

At approximately 0600 hours the fire, with a westerly then southerly movement, outflanked the night's backburn and moved out of control through the Karri forest towards the Boranup Mill.

Departmental forces were regrouped twice at approximately 0900 and 1100 to attempt to control the fire but in both cases the attempt had to be abandoned as the fire had passed the proposed lines before any effective work could be achieved.

Finally, at approximately 1130, due to the threat offered to State Forest 62 at Treeton, Keenan Plantation and even Margaret River Township itself, by the Treeton fire, the Department's forces were withdrawn from the head of the Karridale fire.

During the afternoon the main body was regrouped at Keenan Headquarters while reconnaissance of the Treeton fire and the final control of the Rosa Brook fire was carried out.

During the evening and night of 3/4 March, patrolling and mopping up of the Treeton fire, which had been stopped by the local Bush Fire Brigades in the late afternoon, was carried out.

Saturday, 4th March

From this point onwards, all Departmental action took place on other than State Forest and Timber Reserve, except in S.F.63, north-east of Nillup. Throughout Saturday, the following tasks were undertaken by the Department:-

(a) Further patrol of the southern flank of the Treeton fire.

(b) Control of the Forest Grove-Karridale tail fire west from Forest Grove to the Caves Road. In this work local volunteers assisted and eventually control was left entirely to them in this sector.

(c) Reconnaissance and initial control of the fire moving north out of Location 83 into the Chapman Brook area.

(d) Reconnaissance of the fire east of Warner Glen (in State Forest 63), which had moved from north and east of Nillup.

(e) Two Departmental gangs, ex Collie worked under control of local Fire Control Officers in the Kudardup-Karridale area.

Could I make a correction please?

Yes?---In the light of subsequent information, I find that there were more than two gangs and that they were not Departmental gangs. They were displaced miners from various Departments and there were none of our normal or regular Forests Department employees with them. I do not know anything of their action. They were completely under the control of the local authority. My prepared statement continues--

During the night 4/5 March, efforts were concentrated in the Chapman Brook forest area.

Sunday, 5th March.

Action during the day was as follows:-

(a) Patrol and mopping up of the Chapman Brook sector.

(b) Fires east of Warner Glen (along the Great North Road in State Forest 63) were controlled.

(c) Reconnaissance of fires burning in private property in the Warner Glen area was carried out.

(d) A small fire on the Margaret River townsite was controlled.

Monday, 6th March.

Patrol and mopping up in the Chapman Brook, Warner Glen and Great North Road sectors continued with no major breakaways reported.

Tuesday, 7th March.

Further patrol and mopping up was carried out in the Chapman Brook area. A small gang brought the northern flank of the Treeton fire under final control.

Later. Patrols were continued during Wednesday, Thursday and Friday, 8, 9, 10th March.

(4) Pre-suppression Measures.

Access. The access, recently constructed in the various reserves in the Forest Grove-Boranup area, is shown on the attached plan and consists of --

(a) Reserve 72/25 Forest Grove - Approximately 12 miles constructed during 1960.

(b) S.F. 45 and Reserves in the Boranup area - approximately 40 miles constructed during 1958 and 1960.

(Apart from this - not shown on the plan - there were approximately 30 miles, constructed in Reserve 60/25 at Margaret River during 1957 and 1960).

This work was all done with departmental labour and equipment and the roads, intended as protection access, were constructed to "Forest Track" specifications.

Controlled Burning.

The controlled burning carried out by the department in the area of the Forest Grove-Karridale fire is shown on the attached plan. The area covered is not large because --

(a) Until 1957 the Forests Department, Margaret River, was concerned only with the protection of the Keenan plantation. They had previously attended fires at Boranup plantation, but never, to my knowledge, had they controlled fires or burnt in the other reserves south of Margaret River.

(b) The tracks from which burning could be controlled were not constructed until 1957 in the Boranup area and 1960 in the Forest Grove area.

(c) Since these dates some burning has been done, but the usual difficulty of suitable weather has been experienced as far as the karri areas of Boranup are concerned.

(d) The gang available at the Forests Department, Margaret River, for such burning is small. (The full complement is an overseer and 11 men, five of whom have been engaged full-time on the production of sawn pine.)

(e) Most of the controlled burning efforts of this small gang during the years 1958-60 have been concentrated on Reserve 60/25 and the areas of State Forest 32 to the east of Margaret River. (The prior burning in Reserve 60/25, shown on the plan, was almost entirely responsible for preventing the spread of the Rosa Brook fire towards Margaret River township and other areas to the south).

To place the department's position in better perspective, I would like to point out that in the South-West coastal strip, stretching from Busselton to Augusta, over most of which this small gang is the only Forests Department source of manpower and equipment, the areas occupied by State Forests and timber reserve are relatively small.

The general public often considers any forested areas to be under the complete control of the Forests Department. In this district, however, there are extensive areas of uncleared or partly-cleared land which are privately held. The greater portion of such areas has been heavily cut over by saw mills, is now derelict forest and not considered for dedication as State forest and, therefore, not included in the department's protection plans. I do not know of any co-ordinated plan for the controlled burning of this privately-held land.

(The plan exhibited shows the tenure and condition of this coastal strip as gleaned from 1956 air photographs; the position then was such that, on the area covered, there were approximately 200,000 acres of under-developed private property as compared with only approximately 82,000 acres of cleared, ring-barked and pasture land. The position has not changed radically since then).

(5) Time of First Action at Forest Grove.

Statements attributed to a bush fire warden have appeared in the Press recently concerning the time of first attention given to this fire by the Forests Department. It is considered that this is a suitable point at which to refute the inferences in such statements.

At the time of first advice the officer then in charge at the Forests Department HQ at Margaret River had only the five men working at the pine sawmill at his immediate call.

The department's primary concern in this district is the protection of the valuable plantation area at Margaret River and these men are held available for this purpose alone, unless extreme emergency arises elsewhere.

Further, there were several private property burns being carried on in the district following what the department considered was too early an opening of the burning season. (Indeed all the fires which developed at the time were caused by these burning-off operations). The position at the Forest Grove reserve also was such that the officer decided not to attend until the following morning because --

(a) It was approximately 14 miles by road from Margaret River.

(b) Mr. Hollands, a fire control officer, from whose property the fire escaped, was in attendance and had notified other persons in the area.

(c) The country bordering location 2760 had been burnt by an uncontrolled fire in January 1958. This, together with a controlled burn of spring, 1960, in the western half of the reserve, as well as recently-constructed tracks in the area, was considered sufficient to allow the fire control officer and his men to contain the fire.

It has also been stated that a second call to the department was made at 0200 hours on 2nd March. This is not correct and even Mr. Hollands himself has said that he made an attempt to call at 0400 hours. At this time the Forester in charge was on his way to Forest Grove as already stated.

(6) Details of Weather during the Period of the Fire.

The following are details of the maximum and minimum temperatures and the wind directions at the Forests Department's headquarters at Margaret River for the days 27th February to 6th March, 1961:-

BY THE COMMISSIONER: You can just describe the hours of the days on which these readings were taken, and you can give the maximum and minimum temperatures?---The weather readings at the Forestry Department headquarters at Margaret River are taken at 0730 hours, taking the first set of readings, and then at 1000 hours; the second set at 1400 hours and the next at 1600 hours. The readings taken are the temperature, the barometric reading, the dry bulb and wet bulb reading; and the cloud type and direction is recorded, and the wind direction and strength is recorded. For the particular days, on the 27th February, the maximum temperature was 82 and the minimum 68; on the 28th February the maximum temperature was 79 and the minimum 64; on the 1st March the maximum was 99 and the minimum 71; the 2nd March, the maximum was 100 and the minimum 81; on the 3rd March the maximum was 101 and the minimum 74; on the 4th March the maximum was 84 and the minimum 63; on the 5th March the maximum was 86 and the minimum 65; and on the 6th March the maximum was 86 and the minimum 64. I have added this final sentence, "A complete table of all weather readings taken at the HQ during this period is added as an appendix."

You say at the commencement of your statement that the fire which burnt through Karridale, on Friday, 3rd March, 1961, originated in the Forest Grove area. How do you know it originated in the Forest Grove area?---Our first reconnaissance of the fire burning in the Forest Grove area was made in the early morning of the 2nd March; and we followed the head of that fire, fighting it the whole way until it escaped from us at 0600 on Friday the 3rd. We then followed the head of it down as far as Ray Buller's, location 1353, when it would be approximately 1½ miles from Karridale, I should think, without referring to the plan. The figure of 1½ miles is an assumption.

You feel quite satisfied, from what you say, that Karridale was not burnt by any fires lit from flying debris from other fires in the district?---Quite satisfied, yes.

You say that the first action towards suppressing this fire followed a reconnaissance by the forester in charge at 0400 hours. When was he first notified of the fire?---That particular officer was first notified at approximately 1730 hours on the previous day, which would be the 1st March.

How did the message reach him?---From the junior officer who had been in the Margaret River headquarters when Mr. Hollands phoned through at approximately 4.30 or 1630 hours.

She took the message?---I point out that the girl working in the office took the message and passed it to the forest ranger then in the office and he further passed it on to the officer in charge at 5.30.

When the officer in charge came back to the office?---Yes.

He did not go after him?---No.

Was it reasonable to expect him to go after the officer in charge?---I would not have expected him to do so. He had been out tree-marking and was due back at approximately 5 o'clock.

You have a plan there. Perhaps you could bring the plan up this end, and we could see these places as we go along?---Very well.

You say that the first action, following a reconnaissance by the forester in charge at 0400 hours, was an attempt to contain the southern movement of the fire in Reserve 72/25. Would you show us that?---Yes. It is along an east-west track marked A. It does in fact swing north-east towards 2760.

You go on to say that the westward movement was temporarily left as, in this direction, it was running into a belt of country varying between 40 and 80 chains in depth, which had been burnt in Spring, 1960. Would you normally expect that class of country to burn in the weather conditions that prevailed"---As it turned out on that day, with the weather conditions on that day, the 2nd March, it was, in fact, burning very slowly through there. I would have expected just that: that it would have trickled through it and not burnt at any great pace.

Do you happen to know if that is what the forest officer down there also thought?---Yes.

If it was burning so slowly, why could not the local people handle it? Were there not enough there; or don't you know?---I do not know. I cannot say just how many were there, but I think they could have handled it in that burnt section of the reserve. It was the southerly, or the south-easterly movement that was giving trouble as far as stopping it was concerned.

But the south-easterly movement was burning through your Spring burn?---Not when I first saw it. By that time it had passed over the track marked A on that plan, that I have just mentioned, and was burning in country that had been last burnt in January, 1958.

Were you not surprised that you could get over that track with the track unclean?---No; the track was quite clean. It had been graded only a few weeks before. I was surprised that they could not hold it, actually.

You say that the fire broke from this attempt at control at approximately 0900 hours, and then you made another attempt along the road marked B. Would you show me where that is?---That is the track that has previously been referred to by Detective Walker as Bull Ant drive.

You say that at approximately 1600 hours the fire crossed into the private property on the western side of the main road. Was that the main fire or a jump from your backburn?---No; it was a jump from the main fire.

You say that during the night of the 2nd/3rd March you completed your firebreak across to the old W.A.G.R. line by first light. Approximately what time was that?---I would say about 5.30.

Half an hour later, then, you say, "At approximately 0600 hours the fire, with a westerly then southerly movement, outflanked the night's backburn . . . . . ."?---Yes.

When you say that that fire break was put through and held, do you know if that backburn fire ever got over the trail from which you burnt?---No. The last time we inspected it was at 0730 hours that morning, and I would not know what happened after that.

You also say in your statement, "Departmental forces were regrouped twice at approximately 0900 and 1100 to attempt to control the fire but in both cases the attempt had to be abandoned . . . . . ." Did they actually do any more than regrouping?---They did very little. They regrouped the first time at 0900 at Antonovich's mill close to Boranup plantation. They had in fact back-burnt approximately one chain only before the head of the fire passed them to the west. The second time they regrouped they were about to bulldoze a track through Location 1353, but they abandoned that plan because the fire was already well into the location.

You say, "Finally, at approximately 11.30, due to the threat offered to State Forest 62 at Treeton, Keenan plantation and even Margaret River township itself, by the Treeton fire, the department's forces were withdrawn from the head of the Karridale fire." Whereabouts was the Karridale fire at that time; that is, 1130, when you left?---This is viewed from some distance and I would say that it is in the northern end of Location 1353 on the east side of the W.A.G.R. line and just burning on to the Boranup sand patch on the west side of the W.A.G.R. line. (Witness indicates on map). That was viewed from the north-east corner of Location 1353.

You say, "During the afternoon the main body was regrouped at Keenan Headquarters while reconnaissance of the Treeton fire and the final control of the Rosa Brook fire was carried out". What was done

by the employees of the department at the Rosa Brook fire?---On the previous evening, the 2nd March, at about 1700 hours, a forest ranger and four employees put under control the edge of the Rosa Brook fire burning in reserve 60 and then left it controlled at approximately 2200 hours. The following day, the four men returned and patrolled that controlled edge. That is all the action we deemed necessary at Rosa Brook.

How did those men get to the Rosa Brook fire? Did they come off the main fire going towards Karridale?---On the Friday, yes. They had been down at the Forest Grove end of the Forest Grove-Karridale fire. They were withdrawn when the fire broke away and beat us to Rosa Brook so that they could patrol that. On the previous day, the 2nd March, they had been acting as a standby crew on the plantation at Margaret River and were kept there until 5 o'clock and then they ran out to control the Rosa Brook fire.

Were you asked for help at the Rosa Brook fire?---No, but it was a fire burning in a timber reserve and it was only 4 miles in a direct line from the Margaret River township itself. It was burning, in a previously controlled burn of 1960, but had it trickled through, if it had been left uncontrolled, it would have been a straight westerly run into Margaret River.

When you went out to Holland's fire were you actually asked to go there? Did he ask for help from the Forests Department?---From the report obtained from the girl in the office he did not ask for help; he merely rang and said that the fire had escaped from his property and was burning in timber reserve 70.

You would normally regard that as a request for help? You would regard that as an indication that he wanted help?---It would be an indication that help was required, certainly.

You speak of the control of the Forest Grove-Karridale tail fire west from Forest Grove to the Caves Road. What do you call the Caves Road? Can you show me on the map before you?---It is the road coming down from Yallingup in the north to Karridale and Augusta in the south.

When you say you left the control of that to local volunteers, were those men already at the fire when you were putting your backburn through?---No, not to our knowledge.

They came along afterwards?---Yes.

You knew that there were men there?---In this instance, on the Saturday, yes. I could perhaps elaborate a little there. The forester in charge handled that sector himself with a skeleton crew of ours -- three men from memory, plus two heavy bulldozers -- with the help of these local volunteers, and then, at about 1830 that night, he handed over complete control of that area to Mr. West who is the secretary of the roads board there and withdrew our men and equipment completely.

What was in front of that fire when you withdrew that could still suffer from burning? Obviously, there was Karridale, but there was also part of a forestry reserve, or a State forest, was there not?---No, unless you take into consideration this portion of State forest 45 which is occupied by the Boranup sand patch.

That was all that was left belonging to the department?---Yes.

Where is the Chapman Brook area? Will you show it to me on the plan?---It is between Forest Grove and Warner Glen.

I have never heard that fire mentioned before?---It is part of the fire from Forest Grove or Warner Glen.

Where is Kudardup?---It is not on that map.

You refer to a small fire on the Margaret River townsite which was controlled on Sunday, the 5th March?---That is 1 chain in extent.

What started it?---I do not know.

How was it notified?---One of the officers returning from the Chapman Brook night-work saw it at 11.30 on Sunday morning.

Was it put under control by your men?---Yes.

What do you mean by forest track specification? I am thinking of the width and extent of cleanliness of the firebreak?---The width of clearing a forest track to specification is 12 ft. I cannot remember the other details or specifications which make it a forest track.

But there is a clean break about 12 ft. wide?---Yes.

You say that the controlled burning was carried out by the department in the Forest Grove-Karridale fire as shown on the attached map. Where is it?---The yellow marking is the 1958 controlled burning and the green marking is the 1960 burning.

You say the area covered is not much. Have you any idea what areas there were in each of those two years?---I have not measured them.

You say that most of the controlled burning efforts of this small gang -- that is the Margaret River gang -- during the years 1958-60 have been concentrated on Reserve 60/25. Where is that?---On the north and south of the Margaret River east of the township.

You say, "the areas of State Forest 32 to the east of Margaret River". Where is that?---I will indicate that to you on the map (indicated).

You also say "The prior burning in Reserve 60/25, shown on the plan, was almost entirely responsible for preventing the spread of the Rosa Brook fire towards Margaret River township." In which direction is that?---Westwards.

You say you do not know of any co-ordinated plan for the controlled burning of this privately-held land around Karridale. Have the local authorities ever sought the co-operation of the department, so far as you are aware, in protective burning?---Not as far as I am aware.

Have the people owning large quantities of private property ever done so?---No.

Have you ever sought the assistance of the private persons owning areas of forest land?---No.

You say there were several private property burns being carried on in the district following what the department considered was too early an opening of the burning season. The opening of the burning season this year was the same date as has been the case for some years previously. Is that correct?---No.

How was it fixed this year?---Of this I am not sure. I assume by representation to the Minister through the Bush Fires Board.

You do not know who made this representation?---No.

How do the dates compare with the dates of the previous year?---Approximately a fortnight earlier.

So when it approached the opening date this year you would expect the local people and the council to be watching fairly closely to see if they could sustain that earlier opening or extend it, which they had the power to do?---I would have thought so.

What was the weather like about the time they would have been considering that? Was it bad weather or otherwise? I ask this question because I understand that around the 27th and 28th the weather forecasts were not unfavourable. Rain was spoken of. But what about a week before that? Do you remember what it was like?---I cannot remember the detail of the weather a week before. But the whole summer had been a long dry one. There had been no rain of consequence in that area and the fuel was very dry.

So you would have thought it would have been reasonable to extend the prohibited period for at least another fortnight?---Yes. Speaking personally, as the officer in charge of the department, we were waiting until after the first rain before we attempted any burning.

Did you make any representation to the local authority to have that period extended?---No.

Did the department do so?---Not that I know of.

Have you ever known the department to make representations to the local authority for an extension of the prohibited period when they thought it was going to be dangerous?---I do not know.

Would you expect that they would not normally consider taking any action but would leave it to the local people?---I think that is the drill. I think in Busselton we did get in touch with the Fire Control Officer and asked him to notify us if they intended to do any burning. We did not attempt to have the burning permission withdrawn, but we wanted notice of it, and they were all very willing to co-operate on that score. But it was unnecessary because they also assumed the weather to be too dry and too dangerous for burning, and they would not issue permits to the local farmers anyway.

I am left with the impression that, after all you feel about this fire, the small body of men you had available had as their main purpose the defence of the Margaret River plantation and the immediate surrounding forests?---More of the plantation than the surrounding forests. The immediate surrounding forests come in solely because we have concentrated our burning largely in protection of that plantation.

You say that it has been stated a second call to the department was made at 0200 hours on the 2nd March but that the statement was not correct. In case you are not aware that statement was corrected in evidence although the correction did not appear in the Press. In the appendix to your report you have a column headed "Local Estimated Fire Hazard". What is that -- estimated as the actual fire hazard of the day, or the estimated forecast of the fire hazard?---That is the estimated hazard for the day after the day finished.

For the 27th and 28th February the actual hazard appears to have been a lot higher than the forecast?---Yes.

What was the forecast for those two days?---I would not know from memory.

As officer in charge of the district, do you feel that the action which the officer in charge of the Margaret River district took was reasonable?---Yes. You make it very difficult to answer. I have the picture now that the events have happened. Had I been in his place I would have done much the same as he did.

In the circumstances which existed at that time, in your opinion his action was reasonable?---Yes.

Did you find any help being offered to you when you commenced the backburn which finally held the fire until you were outflanked west of the W.A.G.R. line?---Nobody approached me, although I was not there all the time. I have since seen the two foresters who were in charge at different times and they said they had not

been approached by anybody to do one thing, or not to do another.

We have been given the names of three persons who approached the Forestry officers and offered help -- Crain, Pat McDonald, and Doug Cross. Do you know any of them?---I have seen Crain but I do not know him personally. I do not know the other two.

Did you see them in the vicinity I was speaking of when lighting the backburn?---No, I did not. Not only was I not present for a lot of the time, but I do not know the local inhabitants very well. The officer in charge of Margaret River would be better able to answer this question.

How far was the line of that backburn to Slabby Creek?---Twenty to 30 chains.

We have been given distances ranging up to a mile?---I have the line of that backburn on this plan. On appearance it is closer to half a mile to Slabby Ford.

How far away was the main fire from you when you started to backburn?---50 to 60 chains.

Would you say it was practicable to have got closer to it with your backburn?---It would have been practicable to have got closer to the main fire with the backburn on its eastern edge; that is, adjoining Bussell Highway. But the chief problem was to get right around the southern and western edges of that fire. By starting on the track, where we did start the fire, the lighting up could be put forward much more quickly. With that in mind the starting point and the line of the burn was the only sensible one.

As I understand your evidence, even from where you started you failed to contain the fire in the first two attempts, and the fire got around the end?---That is correct. Both the northerly tracks which were put in were outflanked by the fire.

It has been suggested to us that the back fire should have been started from the west coast. Would you comment on such an action?---I cannot understand the suggestion for starting it from the west coast. By doing so we would be lighting some four to five miles away from the head of the main fire. The tracks leading out to the west coast are not suitably situated to light from, in order to stop the fire on Bussell Highway. We would probably still have been burning that to get back to the main fire. It is some distance through fairly heavy karri forest.

Another suggestion was to start the burn on the property of Ray Buller on Location 1353. Would you comment on that?---That has the same big disadvantage; instead of 50 chains away from the main fire we would be about two to three miles in front of it, as shown on this small plan. We would have taken the fire that much closer to Karridale anyway.

But you might have contained the main fire?---I fail to see why. We would have allowed the fire to build up on a wider face and it would not have arrived until the heat of the following day and we would have had a lot of trouble.

You would have had a wider backburn to contain it from, and you would have got across before it could outflank you?---I think we would have been setting ourselves a terrifically far larger task than the one we tackled.

Mainly on account of the heat which had developed in the middle of the day and the distance?---It would have had that much more time in which to build up into a wider face, and it would have been a hotter fire than that which we were tackling.

Do you think it possible that any action taken by Forestry employees there may have hastened or aggravated the burning by the fire of property in the vicinity of Karridale?---No, I think just the opposite. I think it delayed it. The fire moving down from Boranup would have been further advanced and on a wider face than it was on Friday morning.

In describing the severity of the fire one witness has said that forest country to the south and south-west had not been burned for 10 to 16 years. Would you say that that was correct?---That is not correct.

One particular part mentioned was in the vicinity of Boranup. Would you say that the country was burned?---I cannot remember the exact date, but it was burned in 1956. The fire escaped from a sawdust heap and the manager of the mill at that time was prosecuted and fined for allowing the fire to escape. It burned practically the whole of that karri forest.

There was property down there that might have been not burned for a considerable period?---Yes.

The particular part mentioned was from Boranup along the bottom of the hills, which I think to be the Karridale sand dunes?---Yes.

Would that be Crown land, State forests, or private property?---It was private property, immediately on the east of the Boranup sand patch. It was actually owned by Millars' Timber and Trading Company.

It has been suggested that the back fires should never have been lit because a ban on the lighting of all fires had been declared. Would you care to comment on that?---The backburn was a direct fire fighting measure. It is quite legal to light a backburn in an effort to control an uncontrolled fire; and the objective was to contain the fire on the west side of the Bussell Highway by burning back into it. As such, I consider it was not only necessary but it was the only was of tackling it.

It was necessary and quite legal in the circumstances?---Yes.

Did you hear of any burning-off operations taking place in the Karridale district around that time?---I have no knowledge of what went on in the Karridale-Kudardup district at all.

Do you know when that ban on the lighting of fires was revoked?---It was partially revoked for the lighting of pasture on the 13th March, and completely revoked, I think, on the 15th.

Do you see any reason why people should have thought it had only been imposed for one day?---No, I do not know why anybody would think that.

It is not common practice to impose these bans for one day at a time?---I would not say that, but the weather circumstances and the terrific trouble we were having in controlling the fires in the district at that time

would surely have led people to believe that the ban would not be revoked until we had at least these fires under control again.

One witness has stated that the fire was left on Thursday night without any Forestry men in attendance. To your knowledge, is that correct?---No, it is not. Speaking personally, I left that backburn at approximately 2030 hours on the 2nd, but I had full reports on the work done during the night, which means they were there all the night and were assigned to that task.

It seems to the Commission there is some anxiety to place the blame upon the Forests Department -- that the fire which escaped from the backburn burnt Karridale. Could you suggest any reason why the local residents should be inclined to blame the department? For instance, is there any feeling between the department's representatives and the local settlers in that district?---I do not know of any.

BY MR. McARTHUR: When the Forests Department were putting in the backburn on the west side of Bussell Highway what was being done on the eastern side of the Bussell Highway? Was the backburning in operation while the settlers were there?---I do not think the settlers were actually conducting any firefighting operations. From hearsay they had a wide strip burned in the Spring which they were hoping would contain the fire.

Along McLeod's break?---Yes on the north side of McLeod's break as shown on the plan.

Did your men or yourself know what the position of that fire was on the eastern side around about 11.30 on the Friday when they returned to the Treeton fire?---No.

You suggested that when you put these backburns in from west of the Bussell Highway the first two times the fire had outflanked you. Did it outflank you or did you actually cut across the head of the fire and spot it across your lines?---It was spotting. I am working from the report of the officer in charge of that line. They were about to cut it but they did not actually cut it.

They were just approaching - - -?---They were just getting up to the head of the fire and it was lighting up ahead of where they would actually have been burning. In other words, it would swing their work westwards all the time.

BY MR. HALE: Is there any general instruction to forestry officers for action to be taken on notification of a fire?---Do you mean a written instruction or a standing instruction?

A standing instruction?---Well, I should say that in this particular district the only standing instruction is that the officer in charge is to attend the fires in a district outside the plantation or immediate plantation if he is happy that there is no real danger to the plantation itself. That is how we work it.

In your opinion, what is the general co-operation between the forestry and the local authority like? Is it good, bad, or indifferent? How do you find it in general?---I do not know if it has ever been put to the test, but I would say that there is no feeling either way because very seldom do we actually come in contact. I am perhaps speaking personally there. The forester in charge of Margaret River may have a much closer contact with the local authority at Margaret River than I myself at Busselton do, but I do not know of any real basis for contact at all. We do not work in together and we do not not work in together. The situation seldom arises.

You think then that there is room for improvement in regard to a co-ordinated plan for the district for protective burning?---I would think that definitely this is necessary. I might point out there that on the Thursday morning, as soon as I was able to sum up the position, I did go straight to the road board office with the intention of organising some co-ordination or some working together, but there were only two female employees in the office. I could not find anyone else there.

BY MR. OATES: You have said you had only a very small number of men available to you at Margaret River. I am wondering why it was not possible for the Forests Department to call on some men to the Treeton fire in particular from Ludlow, Willcox, and Jarrahwood areas?---We did do that, Mr. Oates. The men who put

through the backburn that night following the relief of the Margaret River gang were, in fact, the Ludlow gang. The Treeton fire I mentioned was controlled and mopped up afterwards by the locals. That was primarily done by the Nannup gang.

BY THE COMMISSIONER: Do you wish to submit that plan as an exhibit?---Yes.

EXHIBIT EXHIBIT A6: Lands Department litho 440/80 with details of the fire & controlled burning.

(The Witness retired)

THE COMMISSION ADJOURNED.

W.H. EASTMAN,
22/5/61.

TUESDAY, the 23RD MAY, 1961

SAMUEL CHARLES COOK, Apiarist
13 Pelham Street, Toodyay,
Sworn and examined:

BY THE COMMISSIONER: What is your occupation?---I am an apiarist.

Are you a land owner in this State?---Yes, in conjunction with beekeeping we do own farming land.

Can you say what the location numbers are?---I am not sure but I do know that the homestead block is No.4041.

Can you tell me what district it is in?---It is in the Toodyay Road Board district.

I understand you have prepared a statement of evidence?---Yes.

Would you kindly read it?---Very well. It is as follows:-

Uncontrolled fire has always been a problem to beekeepers and falls into three categories. They are --

(1) State Forests and Crown lands.

(2) Uncleared privately owned land.

(3) Flora reserves predominantly scrubs.

No.1.

Uncontrolled fires in State Forests and Crown lands have on occasions destroyed flowers and future buds causing severe losses to beekeepers having apiary sites in the particular area. Controlled protective burning here while destroying temporarily some valuable scrubs does little if any harm to the trees, therefore is welcomed by beekeepers. There is however a suggestion we would like to make. Where large-scale protective burning is being carried out sections of the forest should be burnt in alternate years so that in any given year portion of the forest will contain scrub of value to the beekeepers.

No. 2.

On many occasions it has been noticed that privately owned uncleared land is left in a dirty and dangerous condition for years until by mischance or design is fired in hot weather with grave danger to other landholders and complete destruction of the trees for honey production for

many years. From the community aspect we believe that local authorities should have power to request that all dangerous bush in private holdings be made safe by burning under cool conditions. While appreciating the landholders' difficulties, beekeepers would be very grateful if all types of protective burning was done under very moderate conditions at not longer than three-year intervals so as few trees as possible will be harmed. These trees are of great value to beekeepers and we deeply appreciate the wonderful co-operation received from the vast majority of farmers in being allowed to maintain apiaries on their properties.

No.3.

Flora Reserves refers particularly to the west coastal reserve from Dongara southwards. This is the most precious bee-breeding area in Western Australia and most sensitive to fire which causes total destruction to Dryandra Florabunda (Parrot Bush) regrowth being only from germination of seed. It is at least five years before young plants carry sufficient flowers to be of value to the bees.

Devastating fires occurred in a great deal of this area in the summer of 1961. Generally it is not realised the great loss sustained by beekeepers having apiary sites west of Three Springs and in the Lancelin area. This country will not be useful again for five years. Prevention is difficult and we must stress to all whose land adjoins this reserve or who enter upon it, the great value to beekeepers and the absolute necessity of using the utmost care in preventing fire from destroying this most valuable scrub.

Protective burning owing to climate conditions and the inaccessible nature of the country is difficult but must in some way be overcome. Of valuable assistance for all protective burning would be a provision in the bush fire regulations that the Bush Fires Board after April 1st, depending upon weather conditions from year to year, should issue an instruction that protective burning without permit can be carried out providing fire hazard is not above moderate, and due precautions are taken regarding damage to private property adjoining in case of reserves. To assist in this, the Weather Bureau could be requested to make fire hazard forecasts available for broadcasting while necessary.

The next paragraph concerns karri. Some fires have occurred in the valuable producing karri forests of Manjimup, Pemberton, and Karridale, causing loss of flowers and buds that may have yielded nectar in the future. However, on the whole, due to excellent control exercised by the Forests Department losses in Manjimup, Pemberton areas have over the years been small. While some damage has occurred in portions of the forest unless it is very severe the karri trees will recover and bud once more within a few years.

Are you a fire control officer of a member of a bush fire brigade?---No, but I am associated with my brothers one of whom is a captain and the other a lieutenant.

They are officers in the bush fire brigade?---Yes.

And that is in the Toodyay Road Board area?---Yes.

Could you give me any idea as to the value of the honey industry in Western Australia?---I know that honey to the value of some £240,000 was exported two years ago. The present figures are not available.

In addition to that of course there would be an amount consumed locally?---Yes.

You do not know that your total production is?---We have had two poor seasons. This year's figures would not be available, because statistics are only taken to the end of June. Last year's production was in the vicinity of 4,000,000 lbs. The previous year it was around 6,000,000 lbs.

Does the price of honey fluctuate to the grower?---A good deal. Two years ago the export price would have been 1s. a lb. Now it ranges between 6½d. and 7d. a lb. export. The local price is reasonable constant.

At about what?---I cannot say what the retail price is. It varies. But the return to the beekeeper would range from 6d. to 10d. depending on the grade.

How many apiarists are there in the State?---Within a distance there are 100 commercial apiarists, but there are a number of others who do it as a hobby.

You say within a distance?---What I mean is there are almost 100 commercial men and then there are a number of others who do not depend on the business of their living.

Where are those 100 mostly congregated -- in the south-west part of the State?---South of Northampton would be about the furthest extension of beekeepers northwards; then they operate down to the south coast, and eastwards as far as Merredin where there is one beekeeper. The majority are located between Geraldton southwards. It is difficult to define a line. There are not many eastwards, but southwards they operate east as far as Esperance.

Do they extend beyond the wandoo belt?---Yes. The wandoo belt ends at Cranbrook and Tambellup, but the beekeepers operate as far as Esperance for a type of mallee.

How far do bees travel in search of honey?---It is generally believed they will gather surplus nectar up to two miles away, but bees have been known to fly up to seven miles. In that event they will get enough to maintain the hive, to have any surplus.

As a result do you endeavour to keep the sites a couple of miles apart?---Depending on the quantity of flowers available. They may be closer than that.

Do members of your association ever have to travel interstate, beyond W.A.?---I recall one beekeeper coming to Western Australia from New South Wales, and then returning later. By and large nobody from Western Australia has travelled interstate.

Do you think there is any possibility that burning the forest encourages flowering of the trees, and have you any observations leading you to that belief?---This is a fairly difficult matter. We have often had discussions in relation to the Julimar State forest where we live. Many years ago uncontrolled fires used to burn through that forest. Over a number of years we have endeavoured with the Forests Department to control the burning. We tend to the belief that a controlled fire does upset the cycle of flowering to a certain extent. A

number of different trees flower every year, whereas when an uncontrolled fire goes through which does not kill the trees but the leaves thereon, the whole lot would flower in a cycle.

Do you know the variety called yakka, which is a type of grass tree -- not the tall variety but the more common type known as blackboy?---The blackboy is a type of grass tree.

In New South Wales, after a bushfire, the area burnt can be delineated within a few months by the fact that all the country which is burnt shows a profuse flowering of these yakkas?---That applies to the blackboy here. If a fire went through in the autumn or spring they will all flower at a given time.

Have they any value for pollen?---The bees do gather pollen and nectar from them on occasions. It has no great value.

What happens to the "kingie" or the tall grass tree?---I am not very conversant with this variety. I have only seen odd ones.

Do you know if the same thing happens in respect of other species, such as heath, after a fire?---Most of these take a long time to recover.

Are they killed?---They are temporarily killed, except the dryandras, which grow by sucker, although some of them germinate from seed.

Do you know any other plants which do not flower within a few months as a result of a burn going through?---Not other than the grass trees which you mentioned.

Do apiarists always protect their sites against bush fires?---Everyone except the careless apiarist would protect his apiary to prevent fires.

By raking, burning or clearing around it?---All methods are used. The preferred method is to burn a small area of one-quarter of an acre. Then the apiary is really safe. In the karri forests it is sometimes difficult, but we get the co-operation of the local forester in charge. Sometimes the Forestry men burn a patch for us on

which to place our bees. In that type of country it is difficult to clear other than by burning. Bees are relatively safe providing the area upon which they are placed is free of all debris. It takes a very fierce fire to destroy them. I have known beehives to escape damage when a fire went through. These were placed in a cleared area with trees among the hives. The fire which went through was so fierce that the leaves on the trees were burned but the hives were not damaged.

You do not need a very wide firebreak?---About half a chain outside the perimeter of the area which has to be cleaned internally. In such a case I would have no worries.

Does a fire cause much destruction to the bees which are out on the wing at the time of the fire?---It is very difficult to reach a conclusion on this point. It is believed that quite a deal of smoke precedes the fire some distance ahead, and the smoke is fairly thick. The bees would realise something was wrong and probably would not leave the hive.

Would you consider one-quarter acre sufficient for a site?---That depends on the number of hives. One hundred hives would probably go on less than one-quarter acre. Sometimes you need to place 200 hives on a site, and that would call for a bigger acreage. By and large a quarter-acre would give sufficient room for the operations of an apiarist. You need to have the extraction plant and so forth on the site.

What payment do you have to make for an apiary site?---In the case of the Forests Department we are charged £5 per year, for a site with a radius of one mile on each side, or two miles all round. On private property this is a matter of arrangement with the landholder.

Regarding the Forests Department, there is no variation in the charge according to the type of country the apiarist is on?---It is a fixed charge.

Who controls the letting of sites on flora reserves?---The Forests Department. This is the only department as far as I know.

Is that the only department to which you have to pay?---Yes. I know the Lands Department has nothing to do with these sites.

You say that flora reserves refer particularly to the west coastal reserve all down the coast southwards from Dongara?---There is one large flora reserve which runs from one mile south of Dongara to the proximity of Jurien Bay.

I cannot define it without a map. It varies from one mile to eight miles wide. It does not follow the coast in a straight line. It is narrow at the top, then wide, and then narrows toward Jurien Bay.

What I was trying to work out is do they also go from there in patches right down to the Leeuwin?---Yes. There is another area near Lancelin Island or the town of Lancelin.

Where is the town of Lancelin?---Approximately 140 miles north of Perth. That is probably a bit rough. There the Army did have a training area but they vacated it. It is now in the process of being surveyed by the Lands Department and the areas of Dryandra, commonly known as Parrot Bush, will be reserved as a flora reserve.

In what months do the fires occur that worry you --- in December at all?---No, generally in the hottest period of the year—January, February, and March, within the closed season usually.

Do you know what is the cause of these fires?---There are various causes. Sometimes they escape from landholders. It may or may not be the landholders' fault. These things are difficult to define.

They are not supposed to be burning at that time, anyhow?---I am sorry I have inferred that they were burning in the closed season. That is not so. The fires that have escaped from landholders have been when the burning season has been open for burning.

I realise that, and I am more interested in those fires which occur in the prohibited season?---It is believed, not without cause, that many of the fires, particularly in the Lancelin area are lit by kangaroo shooters. That area is alive with ticks, and the shooters are reluctant to move around in the scrub without its being burned because the ticks attack human beings. Also, at times, the scrub becomes so high it is difficult to see the kangaroos and the shooters like to burn it.

Would they be licensed shooters? Do you have to have a licence to shoot kangaroos in this State?---Yes and no. I am not quite sure. I know that property owners can get a licence to shoot on their own property and on various ares that become uncontrollable at times, but I think they have to have a permit. I am sure they do, because you cannot sell the skins without a permit.

You do not know of any control over the operations of these people?---There is no actual control over them. The beekeeper is endeavouring to construct breaks and burn strips by stages but it is a major operation.

You referred to a place called Three Springs. Where is Three Springs?---It is inland from the coast, roughly 190 miles north of Perth. The beekeepers go out from Three Springs. There are roads to the coast that allow access to portion of the reserves. There were major fires there this summer.

Do the landholders adjoining these flora reserves to any protective burning or take any action to prevent fires coming from the reserves to their land?---In most cases very little. Some landholders are very good. Generally, the idea is that when the burning season is open "we will put a match in the scrub and let it burn." I do not think they realise the value of the scrub to the beekeeper. If they did I think they would be more careful.

They see no point in protecting their own land for their own sakes?---They protect their own land by burning in the hot season and that gives a break for many years. That country is only burnt every four or five years.

What is the nature of the country?---It is mostly scrub and very rough limestone ridges.

As far as you can see there is no action taken to protect these flora reserves?---No, other than notices erected by the Bush Fires Board stating the penalty for lighting fires, etc.

Nobody does any protective burning on them?---Not up to date, but since this year with so many fires in Lancelin a number of beekeepers have taken action and they have been constructing breaks to the best of their ability.

You say that protective burning owing to climatic conditions and the inaccessible nature of the country is difficult but must, in some way, be overcome? When you say "inaccessible nature" do you mean the scrub on it?---No. It is mostly limestone ridges and they are very difficult to cross as the limestone protrudes above the earth.

Is the country steep?---No, not unduly, but in some places it is difficult to pass over the limestone without four-wheel drive vehicles.

You say that it would be of valuable assistance if provision could be made in the bush fires regulations that the Bush Fires Board, after the 1st April, dependent upon weather conditions from year to year, should issue instructions that protective burning without a permit can be carried out?---So far as the beekeepers are concerned it is difficult to burn in that far away country. You may obtain a permit one day to burn on a certain date and by the time you get there there may have been some rain which prevented burning, or possibly it might be too hot and you could not burn. You have to be very careful. At one stage it might be quite safe to burn and the next day too hot. It is about 70 miles from Three Springs, and this means returning to Three Springs to get another permit. The beekeepers' section feels that if some overall provision could be made whereby protective burning is in the hands of a responsible person it would meet the situation.

That is difficult as you have to define what person is responsible and what person is irresponsible. You think the beekeepers would naturally be careful because they are protecting their own interests in being careful?---I feel sure the majority of beekeepers would be competent and also many farmers would be. They would

probably find themselves in the same order as the beekeeper. They would like to burn around the boundaries of their properties, but they have to get permits, and by the time they have the permit, the weather may not be right. However, if they could go ahead with burning, it could be done, and probably would be done. The feeling among many people I know is that it is difficult if you have to get a permit. The closed burning period is from the 31st October to the 31st May and in the majority of areas there is no danger whatever in burning in May, but we are still tied down to get a permit. That probably applies to farmers and everybody throughout the State. They would like to be protected then. I am sure this is the reason why a lot of burning to prevent fires is not done.

S.C. COOK,
23/5/61.

I can see your point but I can still see there is a good deal of difficulty in getting some people to burn without permits when the season is erratic with its behaviour?---Probably the Bush Fires Board has overall authority and possibly from day to day it could issue an order over the radio as to whether the weather was suitable or unsuitable.

Yes, but when you light a fire you do not always put it out and although you may have suitable weather for a few days, it may be followed by unsuitable days and then you are in trouble if the fire is still alight?---That is true; although on the particular reserves if the weather did become unsuitable later on and the fire did get away, it is very unlikely that it would do any harm other than to bee-keeping country and that would be their back luck. I do not think the bee-keeper would worry about it. He is very anxious to keep fires out, and should some of the area get burnt through his own attempt at protective burning, I do not think he would be unduly alarmed. He would not want to do any harm to pasture country, but that is not likely.

I think you will have to find some better way. The Bush Fires Act is based upon the knowledge that some people are irresponsible and that the responsible people have to suffer some inconvenience as the result of the irresponsibility of others. It is also a fact, from my own experience, that there are a lot of people in the country who think they are responsible but who are quite the reverse?---I must agree with that. Some people believe they know what they are doing and actually they do not. That is true.

There are so many different sets of weather conditions that can arise in a season that anyone, even an experienced person, could end in trouble because of conditions which arise that were not anticipated. Those dates for burning would have to vary with the different zones?---Yes, depending upon the season. For this particular year, with the very early rains, you could have burnt in the north even in April whereas probably

under usual circumstances you would not be able to burn until May. In fact this year, after April was more dangerous than it was during April. It depends upon the rainfall and there are very many factors to take into consideration.

Yes. I am a little hazy on some points here. The main point you are making with regard to karri country is that the Forests Department was very useful to the bee-keeper down there with the protective burning it was doing. Is that correct?---Yes. The opinion of the majority of the bee-keepers is that the Forests Department in Manjimup-Pemberton - which is the area with which I am conversant - has a very good control of fires. After all, I do not take it upon myself to say that I know more than the Forests Department. I think its officers are experts in the matter and most bee-keepers are able to co-operate very well with the forestry officers and we are very satisfied with what they are doing. We are very pleased because we have had assistance from them and when we wish to burn to make sites, we have been able to obtain permission. Even when fires do take place, in the majority of cases they have been controlled and very little karri has been lost to bee-keepers through fires. Unless terribly severe, fires do not do very much damage to the trees so far as the bee-keepers are concerned. Most trees recover within two years and they would then flower within their normal cycles. A fire would have no great effect upon them unless it was terribly severe; in which case it would put trees back quite a few years. But in the normal fire when the leaves are killed or burnt away completely it does not do a great deal of damage unless the particular portion of the forest burnt was carrying buds which would flower in the future.

So your main concern is for the protection of hives and the protection of the lower scrub?---Yes.

And there is not much scrub in the forest country?---There are scrubs in the forest country, but those

scrubs, although they burn, recover fairly quickly and within a couple of years they are again valuable to the bee-keeper.

I know from one or two remarks you have made that you do not wish to cast any aspersions upon any one if you can avoid it, but we have had a lot of evidence as to the difficulties caused by the Forests Department not carrying out protective burning. You say that, "On many occasions it has been noticed that privately owned uncleared land is left in a dirty and dangerous condition for years until by mischance or design is fired in hot weather with grave danger to other landholders and complete destruction of the trees for honey production for many years. Would you care to say whether in your opinion the Forests Department is any worse or better than the average landholder so far as the protective burning of bush country is concerned?---That would be a fairly difficult question for me to answer because I am only conversant with the Manjimup-Pemberton area.

I see you have given your opinion there?---I think that is fairly well controlled. Possibly in odd areas the laymen may believe that more protective burning could be done, but I would like to leave that area in the hands of the Forests Department because I think they understand it much better than I do.

What about the private landholders?---I am referring to them in Manjimup or even in most of the southern areas. The Great Southern I refer to. In the Wandoo forest areas there are may large holdings - take Kojonup and Cranbrook - and I have noticed through the years that we have worked those areas that the uncleared land is rarely, if ever, burnt, unless by mischance or design, and on odd occasions fires have got away and have burnt through all the forest and become a hazard to other landholders. Many landholders have mentioned it to me themselves. Within our own district there are some properties which are not all farm lands. Portion may be farm lands and portion may be bush, and no one worries about them. I have known fires to start

in them and immediately become a hazard to other adjoining landholders.

Have you any other ideas that you think may assist towards preventing or controlling fires or protecting life and property when fires do occur?---Not a great deal. However, I have been discussing the matter with other people and have read in the newspapers of the apparent difficulty of getting an overall control of major fires. It seems that no one agrees among themselves, and it has occurred to me that the Army which is a disciplined force and under the control of officers could be very valuable. They were called in, I know, but it seems to me that some quicker method of calling the Army in may be of assistance. Also within their training it may be possible to train some of the personnel in fire fighting so that they might understand the methods and in any major disaster they could be called in and take overall charge. As I have said, they are under the control of the officers and from my experience of the Army they do what they are told. I therefore believe that they would be able to help, although I will say that I do not wish to make any insinuations against the bush fire brigades because I have worked with them and I am fully aware of their work. I believe that without the bush fire brigades there would be a great may more fires of a semi-disastrous nature in the agricultural areas. It is much

more difficult to control fires where there is forest. But in grass fires and crop fires, and suchlike, I think the ordinary volunteer set-up does a very good job. But possibly, as I have said, if in a major disaster you have some overall charge, it would be of assistance. After all, if one brigade cannot agree with the other, or the fire control officer cannot agree with this and that, if you had the Army in charge, the men in their charge would have to agree and they would probably be able to avert some of the disaster if it did take place.

Have you heard of an organisation called the State Emergency Service?---Yes; but as far as I can gather they do not actually take part. They are not actually at the scene of the disaster. They do not put men in. They are more of a relief - not actually relief, but they did take charge in the flood at Carnarvon. But possibly if you could work the Army in with the State Emergency Service.

That service is responsible for calling in the military, or whatever section of the Defence Forces, when they think they can do some good in a major fire; and for providing special emergency services of any sort - equipment or whatever it might be. That is their responsibility, and I think they do get the military there fairly quickly as a rule?---Yes, I think they do; but as an individual I sometimes think, as an outsider at fires, that probable disasters could have been avoided a day or two beforehand had the Army been called in.

You said that you struck quite a lot of trouble in getting fire controllers and bush fire brigades to agree during a major bushfire. That may be for a good reason that a person who has a backfire thinks it is going to burn out another man's country. That is often the cause of dissension. Would it not be worse if you had an overall autocratic body?---It would be of that nature, of course; that is possible. Of course, the difficulty you

find - I have noticed it in our own district - men are reluctant to direct their own particular - I will not say friends, but particular people of the district. They are afraid of upsetting people. It is somewhat similar to issuing permits to burn. A fire control officer has to live in a district, and it is somewhat difficult when a man says he wants to burn and a fire control officer does not consider the weather to be right, or something like that; and lots of arguments ensue. It is all very involved, perhaps, I admit.

That is simply stressing the importance of having a man of strong character as a fire control officer?---Yes, you have to have the right man.

BY MR. HALE: This more for Mr. Cook's information than a question. The local authorities do, or can, apply to the Bush Fires Board for permission to suspend permits each year?---I see.

So that the provision is already there, and a number of local authorities do do that each year after the season is considered safe?---That is a good point; I would just make a note of that, if I may.

THE COMMISSIONER: Thank you, Mr. Cook. We have nothing further to ask you.

The witness retired.

BY THE COMMISSIONER: Are you a landowner in the district?---Yes.

Can you give us the location numbers of your property?---No.

Can you tell us approximately where it is?---Approximately 3½ miles along the Lower Chittering Road from the main Northern Highway.

Are you a fire control officer in the district?---Yes.

And secretary of the bush fires brigade?---Yes; the Upper Chittering one.

You have prepared a statement for the Commission?---Yes.

Would you read it please?---Yes. It is as follows:-

(1) To answer charges of confusion and other remarks at the Chittering fire.

(2) To draw attention to the fact that there were two outbreaks of fire.

(3) The first fire itself was not on country controlled by the Chittering Road Board.

(4) That during the first outbreak and therefore for the whole fire not any great number of settlers were away on holidays. The manpower was inadequate which caused all men to put in longer hours than could have been arranged. Only one settler definitely refused to help.

Had help been available from the two biggest landholders nearest to the fire it possibly could have been put out earlier and perhaps prevented the second outbreak.

LESSONS LEARNT OR PROVED AT THIS FIRE:

(1) It is impossible to put out fires in hilly bush country without unlimited manpower.

(2) R.A.A.F. Spotting Service - This was excellent. I rang Pearce R.A.A.F. Station asking for this and received same quickly.

Information was relayed from the plane to R.A.A.F. Base by radio; from Pearce to Fire H.Q. by 'phone; from Fire H.Q. to Toodyay Control by 'phone; by messenger to Chittering Brigade.

It was a definite advantage, the fact that all our Fire Officers could understand O.S. maps.

(3) It is a definite advantage to make use of the Weather Bureau forecasting for scene of fire rather than listen to radio broadcasts.

ANSWERS TO QUERIES:

(1) I am of the opinion that the fire came from the direction of the Army property but as to where and when it started I have no idea. We started fighting it as a brigade on December 24th.

(2) Reasons for lack of help --

(a) Forestry - I was told by the local Ranger that he had been instructed that if at all possible he wasn't to call for help during Xmas holidays.

I spent some time trying to contact the Forests Department but without success.

I rang Mr. Sutherland of the Bush Fires Board who had the same success.

I suggest that a Forests Department man be available on the 'phone at all times during the summer.

(b) The Army - I was told by the Officer of the Day that there were no men available owing to the holidays and after three 'phone calls, the second one advising of the exact location of the fire (as spotted by R.A.A.F.), help in the form of two Army personnel in a four-wheel-drive vehicle and trailer with two empty knapsacks arrived out at Keating Road camp, 20 road miles from where the fire they were asked to attend to was.

It was only after we received a lot of publicity did we receive S.A.S. assistance.

BY THE COMMISSIONER: You commence by saying that the evidence given by you is, first of all, to answer charges of confusion at the Chittering fire. What charges of confusion are you referring to?---It was suggested there was a scene of a confusion about the 2nd or 3rd of January. Apparently there was confusion and nobody in control. In my opinion the reason for that was that it was the first time we had even had such a big gang of men available. I suppose about 200 went out. The main confusion, I imagine, was that the fire officers, between them, could not work it out. There was a definite split as to how we were to put this last lot out. One

lot wanted to go out into the hills and the bush, and put it out, and the rest of us wanted to stay down and wait until nightfall and stick a fire in front of it and burn back to it. The confusion started first thing in the morning before Mr. Hale arrived. They decided at 9 or 10 o'clock in the morning that we were going to go out and put it out and called up all the men; and then it was decided it was too far out to do anything and they sent them all home again and wanted them to come back at 4 o'clock in the afternoon. The Army had their own organisation, and it was good. I am afraid it was too good for the local brigades. We just could not match our organisation with them and that actually caused confusion. The Army decided to go "boom", and they got out on the job before the local brigade got around to getting organised. That was actually after the second outbreak. That was only one day. That was the only day we had a big gang at the fire. The three actually were going together. At the first outbreak we only had limited manpower. The organisation there was, I thought, pretty good. We had close co-operation with Toodyay, Lower Chittering and ourselves. I think the main reason why we did not have confusion there was that we only had three fire officers on the job; there were only three available. When you have three you cannot have an argument; it is two one way and one the other. When you have four you can have an argument. We got to and rostered ourselves out. Actually I did not spend any time -- or very little -- at the fire at all. There were two fire officers on the job. They were rostered. All I did was to keep the food up to the men, and the rosters right; and I put in a couple of nights myself out on the break. The main confusion at that fire was caused through too many men. That was the biggest thing.

Speaking of the good work the Army did, do you think they might perhaps have been more effective at that fire on account of their knowledge of the local country and the conditions there than they would have been in other parts of the State? It is an Army area, is it not, to some extent?---It is an Army area, but I do not think

they were any more familiar with it than we were because the first thing Major Clark, the O.C., did when he arrived, was to come to me and say, “Have you got two or three local guides?” So, two or three of us went with them to size up the area. I do not think they had a great deal more local knowledge of that area than of any other area.

The reason why they were so effective was because they had 60 S.A.S. men who were all terrifically fit. That was where the Army had a big advantage. I am not decrying the Air Force boys in any way, but they sent 30 men to the fire who were all office boys, and by the time they walked to the top of the hill with their knapsacks they did not have the energy to pump the knapsacks. However, they did their best. On the other hand, the S.A.S. boys were putting the knapsacks on their backs and carrying them for 24 hours. They were very fit and their discipline was 100 per cent. I think they had more officers than men there.

Does that statement definitely cover the charges of confusion and the other remarks?---Yes.

Then you say in your statement that there were two outbreaks of fire. On what day did the second one occur?---We started putting out the first one on the 24th December. It had been burning previously and it was on the 24th December that we actually started fighting it, and we virtually had it out by the 28th December. We were away out on the Toodyay road and the Air Force sent a plane over again and spotted the area and reported there were three small fires burning on certain locations. I cannot find the numbers of them at the moment. They said that the fire was burning on Army property, so I rang the Army and asked them to go out and put these fires out. That was when we were confronted with the two men in the jeep, and they went out to the Toodyay fire instead of going where they were supposed to go. Then it rained and we had two days off. We had two days of no fire fighting at all, and then there was this second outbreak which, in my opinion, came from the small fire that had not been put out on the 27th.

That had no association with the original fire at all?---It must have come from the original fire, but the

country was all burned out and the fire must have started up from there again on the Army property. From the 24th to the 29th December we were engaged on putting this fire out without getting any help from anybody. When we got the news that we were not getting anybody to help us from the Forests Department, nor from the Army, we had to make up a patrol system in an effort to fight the fire. It took us three or four more days to put it out than we would otherwise have taken.

In your statement you say that over the period of the whole fire there was not a great number of settlers away on holidays. That is in response to a statement made that a number were away, is it?---That is correct.

Have you any idea, approximately, how many were away on holidays?---In the Upper Chittering bush fire brigade area I do not think there was anybody away. There may have been one away, but we had organised our patrol for the Christmas beforehand, and in case anybody was away I had arranged with one fire officer that we would work out our Christmas dinners between us. We had a brigade in the locality over Christmas. We had planned that. I would say that nobody would be away in the Upper Chittering area over Christmas. There might have been a few away in the Lower Chittering area.

You say that the manpower was inadequate which caused all men to put in longer hours than could have been arranged. Have you any idea of the number of hours it is reasonable to ask a man to fight a fire for, say, a week?---In our sort of country I should imagine he could fight a fire for six hours with a meal break in the middle of the spread at least. That is over a weekly period, definitely.

You are speaking of rough country?---Yes, it is steep and rough country. We found that six hours was plenty for a man to fight a fire if one wanted him to come back.

I suppose all your men went home to sleep. They did not sleep at the scene of the fire?---We had a camp at the fire for two nights.

How many hours' sleep do you think a man would require in those circumstances?---I reckon he would want a good 8 hours' sleep but, in this instance, nobody got it.

That accounts for only 14 hours of the day. What about the other 10 hours?---They go home. At this time of the year -- in our district, anyway -- everybody had stock to attend to any they were nearly all carting water to water their stock and looking after their properties. We reckoned that that was the most we could ask of them.

But if it were a matter of a man staying there to put a fire out, do you think he could do 12 hours' fire fighting with 8 hours' sleep and another couple of hours for eating?---If there was a good chance of putting it out I do not think anybody would mind fighting a fire for 12 hours, but a man's efficiency would drop in the last four or five hours. We got more efficiency from the men by working them for shorter spreads. All the time that we had night patrols nobody went to sleep except the fire officer.

You say that only one settler definitely refused to help. What was his reason?---He was too busy picking oranges.

Apparently his land was not in danger?---The first time it was not, but the second time it was, and when I asked him to help he said he was too busy picking oranges.

Even when his place was in danger?---The fire never got within half a mile of his place.

You say that had help been available from the two biggest landholders nearest to the fire it could possibly have been put out earlier and perhaps prevented the second outbreak. Did they ask them for help?---Yes, the two biggest landholders are the Forests Department and the Army. I do not know exactly how much

the Army holds, but I imagine it is in the vicinity of 10,000 or 12,000 acres.

How far is the nearest forest land?---There is an 8 ft. bulldozed track between where we burnt and Julimar. There would be 40 or 50 square miles held by the Forests Department.

What sort of country would it be?---Most if it would be jarrah and white gum country, and if the fire got into that there would be no stopping it. That was our greatest worry. There are a few breaks but they are ineffective. Two bulldozer tracks are not very effective when the temperature is 105.

The Army land is in the same condition, I take it?---Yes, they are both pretty rough.

When you say it is impossible to put out fires in hilly bush country without unlimited manpower, you would qualify that I take it with the weather conditions?---Yes. We must have the weather on our side. The Chittering Valley is cleared and the pasture country goes up to the first lot of hills and from them on to Toodyay it is bush. We went to the edge of the clearing and waited until after dark and lit it even if the fire was half-a-mile away. We lit two chains in the bush. We found it more satisfactory and got away with it with less manpower.

You did not have a back fire escape?---No.

What were you burning back from?---From cleared land. All the farmers along the edge of the forest lost about two or three chains of their paddocks. We burnt two or three chains of grass country and let it go to the hills. We found that was the most effective way of disposing of it.

When the R.A.A.F. plane went up did it take any local people to assist it in plotting locations?---On the first two occasions it did not but the third time they took up one of the fire officers who was an ex-R.A.A.F. man. He went up and came down with a very comprehensive picture of the whole thing. The R.A.A.F. service was quite good except that they did not have a small enough plane. Their small planes were too fast and their

slow ones were too big.

Did they charge you for the service?---Not that I know of. I do not know whom they would charge, or if anyone could afford to pay the bill.

What sort of plane did they use?---A Dakota.

You say that information was finally relayed by messenger to the Chittering brigade. You are referring to the Upper Chittering brigade?---Yes. The Upper Chittering brigade and the north end of the Lower Chittering brigade cross one another. That method of getting it out proved very effective. It was not much more effective than radio. It probably could have been a little quicker.

Where were your fire headquarters established?---We had three during the fire. Our fire headquarters was the nearest phone to the scene of the fire. At one stage it was five miles from it.

In somebody's house?---Yes.

Was the Toodyay control again in a house?---I imagine so. What happened to it once the news got to Toodyay, I do not know. They have a fire control officer resident in Toodyay and I was doing all my contacting to Toodyay through him. What happened to it after he got it I do not know. He would have to take it out by messenger because there is no phone where they were.

I rather think you were not quite correct when you said that the last phone station was the fire headquarters. The Toodyay control would be the last headquarters?---Yes.

What do you mean when you say "O.S. maps"?---Those would be the ordinance survey maps. The R.A.A.F. were accustomed to using them and there was no difficulty as a result of it.

Did you provide them or did the R.A.A.F. provide them?---We all had them and used them normally for the brigade.

In your evidence you say--

> "It is a definite advantage to make use of the weather bureau forecasting for scene of fire rather than listen to radio broadcasts."

Does the Weather Bureau give particular broadcasts for a particular fire you are attending?---Yes. We were running those weather forecasts with the Weather Bureau. We used to listen to the weather forecasts over the air and compare them with the ones from the Weather Bureau. The Weather Bureau was never wrong as far as we were concerned. They were always one hundred per cent. right within the half-hour as to what was going to happen.

Speaking of the reasons for the lack of help you say you were told by the local ranger that he had been instructed that if at all possible he was not to call for help during Christmas holidays. Where would he call for help from?---From the Forests Department.

You were not thinking that he would help?---He was on the job right through.

Who was it?---Mr. Mortimer. He was out at the scene of the fire right through, and he would be the best man to know how long one could go without sleep, because we were all wondering when he was going to have something to eat and when he was going to stop.

I wonder whether there was some qualification when you say he was not to call for help during the Christmas holidays if at all possible? I should imagine that if the matter got serious a responsible officer would want to know what was going on?---I said I would ring Forestry for help, and he said he would get in touch with them, but he was told not to ring if it was not necessary. The fire on Christmas Day would be four or five miles from the forestry area. He came down to see what was going on.

You say you spent some time trying to contact the Forests Department?---Yes.

Did you try to ring the Conservator?---No.

Or the Deputy Conservator, Mr. Wallace?---I worked from the top of the department's telephone numbers to the bottom.

Do you know who was the Conservator?---I do not. I tried 'phoning the department for half an hour. In desperation, in order to get through to the Forests Department I tried to get in touch with Mr. Sutherland by telephone.

You did not know the fire control officer for the department?---No. I tried to 'phone Mr. Milesi, but apparently he was not at home and I could not raise him. Mr. Sutherland met with the same response when he tried various numbers. I understood at the time there was a fire in the Mundaring pine plantation.

In what way did you think the Forests Department could help you?---We were mainly interested in obtaining equipment and men to help us, because we were short of equipment. The other aspect was that the department might send out a qualified man who knew something about these matters, more than we did; and one who could tell us how to put the fire out quicker.

You have a higher opinion of the ability of the department to put out bush fires?---I have not had any experience with that department regarding fire fighting. I gave it the benefit for having men who knew what to do.

You had one of their men from the Gnangara plantation, Mr. Mortimer?---He is the ranger at Julimar. I do not think he has been through the forestry school. His main function is to check on the general run at Julimar. He is the protector of fauna. I would not say he was a full time fire man.

What happened when you rang Mr. Sutherland and he could not get hold of the Forests Department? Did he try somewhere else?---He was trying to contact everywhere else. He missed half his Christmas day by trying to get help but was not successful.

How did you get assistance from the military?---I rang Western Command, and after cajoling and appealing I got on to the officer of the day. I did not get very far until I asked to speak to the C.O., but he was at the races. First I was told they would see what they could do and then ring me back. At this time the plane had gone over and given us the three sites. The Army did not have any men available as most of them were on holidays. The first Army help we got was when they got up to fly the flag.

It was Christmas and the New Year period. Most people who have no responsibilities in fire protection make it a habit of taking their holidays then; the military personnel would be no exception?---The majority of them would be on leave. We could not get anywhere with them.

Had you heard of the State Emergency Service?---I did not know about it until the last bush fire school.

Was that before the last fires took place?---That was after. The first I heard about that service was in January, well after the fire.

Do you know whom you have to ring to get help urgently?---I have no idea. I would ring Mr. Sutherland.

If he were not available, is it generally known who you are to ring?---No.

Obviously Mr. Sutherland would be the main one to ring, otherwise you would ring the State Emergency Service, which is not really a fire fighting service?---If such a situation arose I would ring Mr. Sutherland. I mentioned about the State Emergency Service to a couple of fire control officers in my area, but not very many people know it exists. Once I got on to Major Clarke of the S.A.S., Western Command, and explained the position, I learnt he was in a separate unit. He said he would be up there and within 24 hours he raised his men.

Would he be in charge of the S.A.S.?---He was not the C.O., but probably the officer-in-charge during the holidays.

You have a book to which you refer for dates and times of the fire. Is that one which is used by all fire brigades?---No, this is a notebook of my own.

You also have before you certain plans. Do they indicate anything which might be of assistance to this Commission?---Not very much. They indicate where the fires were.

Would you show Mr. McArthur where the fires were?---I can indicate the fires, the fire breaks, the Army training area, etc., on this plan.

Would you be agreeable to putting those plans in as an exhibit?---Yes.

We can let you have them back when we transfer the information to our own plans?---Thank you.

Have the plane names on them?---They have numbers.

EXHIBIT Exhibit A7 Plan No. 393 (Toodyay)
Plan No. 387 (Chittering)

Have you anything further you wish to tell us?---No.

Have you any suggestions for an improvement generally in the Bush Fires Act and Regulations or anything attached to them ?---No, I think they are quite comprehensive.

You spoke of fire control officers and bush fire brigade officers; and you spoke of dissension at certain times. Was that dissension between the bush fire brigade officers and the bush fire control officers, or was it only between the fire control officers?---It was only a little fight between the fire control officers on their own. I should not say it was a fight, it was only a difference of opinion. We were actually just in the process of fighting when Mr. Hale arrived. I am afraid he walked into it. Two or three knew him and said, "Here's the warden, he can look after himself; we are getting out."

It has been suggested that fire brigade officers are, generally speaking, more useful on the organising side at a bushfire than many of the fire control officers?---Our bush fire brigade officers and fire control officers are one and the same people.

(The witness retired.)

Sitting suspended for lunch.

JAMES MURRAY O'BRIEN
Commissioner of Police,
13 Hamersley Street, North
Cottesloe,
Sworn and examined:

BY THE COMMISSIONER: You have prepared a statement for the Commission?---Yes.

Would you be good enough to read that please?---Yes. It largely deals with the Police action taken in relation to these matters generally, and is as follows:-

One of the prime functions of the Police Department, in addition to the maintenance of law and order, is the protection of life and property, and in this category the Police have very definite responsibilities in relation to bush fires as for any other type of emergency.

It is no part of Police duty to assume the actual control of firefighting operations but this may become necessary on odd occasions where there are no experts available to assume this role.

During the recent extensive fires in the South-West area which resulted in considerable strain on the local fire fighting resources, it is quite possible that, in certain cases, Police had to exercise some form of control. In any case some country police stations in the area were used as a base of operations.

Police must naturally work in close liaison and provide all assistance within their power to fire fighting services. For instance, in evacuation and rescue work, communications, establishment of road blocks, prevention of looting and, as individuals, in many cases assisting with the actual fire fighting.

I note that it was suggested early in evidence that there was some criticism in certain local areas of Police taking control of fire fighting, but I have no knowledge of any such policemen, and as already indicated, I agree that it is not normally a function of police, save in exceptional circumstances.

It is, however, a subsequent function of the Police to conduct the fullest inquiries into the fires and their origin for subsequent submission to the District Coroner in the event of an inquest, if desired.

The State Emergency Service is established as a co-ordinating body to provide ready liaison between the various agencies concerned in the different types of emergency likely to arise and in which assistance beyond that available locally is required. In my view it has proved most effective in this role.

During the period in question, the Chief Executive Officer of the S.E.S., Mr. Lonnie, and myself worked in close co-operation and by mutual arrangement each assumed responsibility in providing all relief and assistance possible from the sources available to us, in response to innumerable requests

received. We both remained on duty or continuously available on a 24 hours basis, including weekends, throughout the disaster period, as at this stage we were also dealing with cyclone and flood troubles in the North-West.

As an example of the assistance rendered per this medium, I submit some brief details relating to the Keysbrook-Dwellingup fire situation.

As a result of a request received from Mr. Sutherland of the Bush Fires Board for help from the Police in communications with the Keysbrook bush fire on the 23.1.61, Sergeant Austin, our wireless technician, and three constables were despatched with a two-way radio car and a battery of radio transmitters, plus two walkie-talkie sets.

They contacted Mr. Straker of the Bush Fires Board, who was in charge, and worked according to his instructions and requirements in providing communications.

Following a further request, another two-way radio car with crew was despatched to the area.

These parties provided communications throughout the night until, on the following day, they were relieved by military personnel who had been called in to assist in providing communications.

At 9 p.m. on the 24.1.61 a message was received at headquarters that the bush fire at Dwellingup was out of control, had cut the main road from Pinjarra, and that all exits from the town were blocked, grave fears being held for the safety of residents, as the mill, school, hospital and police station had been destroyed in addition to a number of dwellings.

An inspector with a sergeant and three constables complete with radio transmitter, were immediately despatched to the area to assist in every way possible. Mr. Rowe of the Red Cross was contacted, and by 11 p.m. buses and four car loads of personnel with necessary equipment had left for Pinjarra.

Arrangements per medium of the S.E.S. were made for an Army mobile kitchen to proceed to the area, and before midday next day permission had been obtained from the Railway Department for the Red Cross to use the Pinjarra Railway Refreshment Room.

At this stage I would like to record the efficient manner in which the Red Cross co-operated with the committee that night and during the following days to alleviate suffering and hardship of the evacuees.

Mr. Wallace of the Forests Department was also contacted and confirmed the seriousness of the position at Dwellingup, and throughout the whole of that night continued to pass information received through Forestry radio, and a liaison link-up was established with Police Headquarters Wireless Station.

As efforts to reach Dwellingup through Holyoake were unsuccessful, Sergeant Harris, a constable and three railwaymen with the radio transmitter from the car, left Pinjarra on a railway trolley and at serious personal risk were successful in getting through to Dwellingup where they found that all the people were safe with, fortunately, no loss of life. They opened up communications with the Police Radio Station in Perth.

Early next morning the Hon. Premier, Mr. Brand, and the Hon. Minister, Mr. Court, with representatives of the Forests Department, Bush Fires Board, and Police, held a conference where Mr. Brand instructed that no effort would be spared in assisting in the disaster and it was then arranged that the Railway Refreshment Dining Rooms and any other facilities would be placed at the disposal of the Red Cross.

The following day I arranged for supplies of tent flys and blankets for the use of the evacuees on loan from the Department of the Army, and had these conveyed in charge of the police sergeant to the Red Cross at North Dandalup and Pinjarra.

As there were still considerable dangerous fires burning in the Waroona and Yarloop areas I obtained, at the request of the Forestry officers concerned, a further 80 Army personnel complete with equipment, transport, communications and rations, who were despatched to the area and placed at the disposal of the Forestry officer.

Here I must mention that the three services, Army, Navy and Air Force, co-operated most willingly with the State Emergency Service in providing both personnel, equipment and transport for use in any area at the shortest notice.

Very considerable assistance was also received from the oil companies in providing large mobile tankers for water conveyances, which were used extensively at the Gidgegannup and South-West fires.

Police wireless cars and equipment were used in several areas for communications whenever required by the fire fighting personnel and motorcycle patrolmen were used as an addition to the local police, both as a mobile means of communication and to assist with road blocks and police work generally.

So far as this department is concerned the chain of command or liaison is from Police headquarters to the District Police Inspector, who controls the several police stations in his district and has individual contact with all police in his area.

All requests for assistance made by Police in the areas concerned are channelled through him to Police headquarters or S.E.S., as may be required, and conversely, all orders issued to outlying police personnel are through the District Police Inspector.

For instance, regarding the fires in the Gidgegannup area, all arrangements were made through the district inspector at Midland Junction and his office was actually used as control headquarters.

The South-West fires were handled by the District Police Inspector at Bunbury, while the flood and cyclone emergencies in the North were dealt with through the District Inspector at Geraldton.

To conclude, I am quite sure that the establishment of the S.E.S., by virtue of its liaison with a great many resources, contributed largely both to a rapid supply of assistance to essential services in disaster areas and also to an early alleviation to distress and suffering resulting from those disasters.

BY THE COMMISSIONER: You refer to the police stations being used as a base of operations during the bush fires last summer. Can you give me any sort of idea of the number of police stations that were used in that way, or their association with the different fires?---The Midland Junction District Inspector's office was used practically on a full-time basis for the Gidgegannup fire. The Margaret River Police Station was used as a

means of general communications between the local police, the fire control officers, and the District Police Inspector at Bunbury; and not actually used as a fire control headquarter. The Yarloop Police Station was used as a basis of communications, and they had several conferences between fire control officers, Police, Red Cross, and other services. Pinjarra Police Station was used as a general co-ordination base, dealing largely with evacuees, the question of establishing road blocks, and general Police liaison work. For instance, people wishing to visit Dwellingup for any type of purpose had first to obtain Police permission.

In connection with the Augusta-Margaret River fire there has been a certain amount of local criticism of the Police taking charge of the operations down there, on the grounds that as they lacked knowledge of the set-up of the bush fire brigades and their officers, they sometimes caused confusion in people's minds as to whom they should obey. I think that a certain degree of feeling developed by those who were there. Can you tell me anything about that?---Up until I heard that, as per medium of the evidence here, I had not heard of any such criticism at all. It was a fact that Mr. West, the local fire control officer, was away on holidays in the early stages, and in those circumstances Constable Sparkes of Margaret River had, at some stage, to assume -- not general control of the general fire fighting operations, but a certain amount of co-ordination. At one stage he remained at the crossroads, Karridale, and then he was directing various parties of fire fighters who had finished in one area, to where they and their services would next be required. About that stage Mr. West returned from holidays and assumed control of the fire fighting operations, and from then on Sparkes continued to assist and had liaison with him. Constable Sparkes is here, if you would like, later on, to ask him any questions.

Thank you; there are a few other matters I would like to ask him. I would like to say, at the same time,

that other witnesses have emphasised the importance of the work that Constable Sparkes did. It was not all unfavourable criticism?---I had not heard of any until this was given. Nothing came through to me from the District Inspector; nor, so far as I knew, had he heard of any such criticism. We did hear that he was co-operating and working very well with the local services.

BY THE COMMISSIONER: Some of these fires, like the one at Gidgegannup, were investigated by the police as a result of a request for a coronial inquest?---Yes.

Then again at places like Augusta and Margaret River the police investigation was carried out in the event of such an inquiry being set in motion. I would like to know whether you always go into the question of whether a coronial inquiry should be called, or when it is only when somebody raises the matter and that possibly arson is concerned or that some legal action may be necessary?---Generally speaking we would investigate and do investigate all bush fires whereby damage is caused to property with a view to submitting the papers to the coroner. If we find, as a result of our investigations, that there was some liability or negligence or breach of the Bush Fires Act, we would submit the papers to the coroner for him to decide whether or not he would hold an inquest. Of course, under the Act somebody may apply, as for instance at Gidgegannup, to the coroner for an inquest. But we do not normally investigate forest fires due to natural causes, unless we receive a request for assistance from the forestry officers. We have frequently done that if there is any doubt about it. But with regard to the Dwellingup fires, it was generally believed they originated from lightning. Hence our investigations extended only to the extent of damage to people's property outside the forest area and not into the actual origin of the fire in the forest. Our inquiries were made to report on damage to properties outside the area, but we did not submit that file to the coroner.

If you waited until you knew there would be a coronial inquest, you would lose a lot of evidence?---Yes. The instructions are to investigate any fire of doubtful origin.

One such has occurred at Denmark. You probably have a report, or the officer in charge has one?---Yes. I could read you the standard departmental instructions on this. It may be of interest.

Yes?---This book I have here contains the general instructions to the police. Under the heading "Bush Fires" it states--

> Police should make themselves conversant with the provisions of the Bush Fires Act and Regulations.
>
> Considerable danger to life and property is experienced from such fires, and every effort should be made to minimise it.
>
> A sharp lookout should be kept for offences and it is provided in Section 56 of the Act that it is the duty of the Police to report offences to the local authority.
>
> Full co-operation should be extended to the local authorities in their efforts to cope with this menace.
>
> Searching inquiry should be made in an attempt to establish the origin of any serious fire and a full report on inquiries made should be furnished to the District Inspector in each instance.
>
> Disastrous bush fires in other States have emphasised the need for the close co-operation between the Police and those authorities entrusted with the duty of coping with this danger.
>
> During prohibited burning times normally declared under the Bush Fires Act when weather conditions become hazardous the Minister for Lands has power to declare a Bush Fire Emergency Period. During such period all fires in the open air are banned including picnic fires, fires for camping or cooking, for burning garden refuse and any other fire of that type.
>
> Announcements of the imposition for an Emergency Period are broadcast over the A.B.C. Stations in the State and Regional News, also in the fire hazard forecast given in the weather news, and apply in all agricultural areas including the metropolitan area. The lifting of the Emergency Period will also be announced in a similar manner.
>
> During these Emergency Periods, Police should keep a sharp lookout for these prohibited fires and if they are located they should be extinguished. A report should be submitted through Departmental channels with a view to the responsible persons being prosecuted.
>
> Throughout the whole of the summer period, Police should co-operate in every possible way with the Fire Brigades and take action regarding any breaches of the Bush Fires Act.

There is also a short reference under "Forestry" which covers, more, forest fires. It is on much the same lines. It is as follows:--

Fire is the greatest menace of the forest, and Police officers are instructed to co-operate with local authorities and officers of the Forests Department in preventing and suppressing fires. This particularly applies to fires occurring during the prohibited burning periods as declared under the Bush Fires Act. Police officers should investigate, in conjunction with Forest officers, wherever possible, fire deliberately lit by unauthorised persons in or near State forests.

Would you know whether you received a report on a fire at Chittering which took place around Christmas time and New Year?---Yes. That was fully prepared for submission to the Coroner. I think it is still in the coroner's office. It has been back and forth from the coroner to the local police for quite some time.

We could probably obtain a loan of it?---Yes. I looked for that file the other day, and as far as I could gather it is still with the coroner. At different times lately he has asked for different information before deciding whether or not to hold an inquest. I could not tell you the exact position he has reached with that one.

Referring to the State Emergency Service, can I take it that either Mr. Lonnie or yourself have to personally authorise any action to be taken; or are you the sole person to authorise it?---Generally speaking either one of us, but I can of course delegate authority to the Deputy Commissioner or the Chief Inspector. Of the three of us at headquarters, one is always available. We have a working arrangement so that there is always one of us available at either the weekend or on a public holiday, and he knows where the others are. If I am not available, the Deputy Commissioner is; and if he is not, the Chief Inspector is. As far as I know Mr. Lonnie has no such deputy. The service has not reached that stage.

What would be Mr. Lonnie's functions? Why cannot it be done without Mr. Lonnie?---He is a very important link in liaison between the service and the Government. He has association with various other departments in which we are not particularly interested. We are more keen on the protection of life and property. But the people having been saved, it comes more in Mr. Lonnie's category to see that they are fed, watered and clothed; and to get some financial assistance from the Government and all that sort of thing. That is hardly the police side of it. So as a co-ordinator and liaison officer he is invaluable in that direction.

Speaking of the Keysbrook fire, you say a request was received from Mr. Sutherland of the Bush Fires Board for help from the police, and that as a result of the request you sent Sergeant Austin, your wireless technician, and three constables with a two-way radio car and a battery of radio transmitters plus two walkie-talkie sets. There seems to be some confusion in regard to the times of the ordering and of the arrival of the wireless cars. Can you say at what time you received the call for assistance from Mr. Sutherland?---Yes. I have checked on this with Mr. Johnson, the Deputy Commissioner, who actually handled it. The position is that at approximately 12.50 p.m. on 23.1.61 Mr. Sutherland of the Bush Fires Board communicated with the Deputy Commissioner, Mr. Johnson, requesting assistance with communications. Under instructions from Mr. Johnson, a two-way radio car with crew also including portable transmitter and two walkie-talkie sets was despatched to Keysbrook arriving at approximately 2 p.m. With regard to the second request, shortly after 10 p.m. on the 23rd January, 1961, a further request was received, again by Mr. Johnson, for a two-way radio car, and Constable Smith and crew took it out of the garage at 10.30 p.m. However, this car developed generator trouble at Cannington, and the constable returned to the garage and obtained another two-way radio car which arrived at Keysbrook shortly before 1.30 a.m. on the 24th.

Somewhere in the evidence it is stated that the call was received at the Bush Fires office at 9.15 a.m. That should obviously be 9.15 p.m.?---Yes. At 10 p.m. Mr. Johnson received that request, and the car would have been there earlier than it did arrive except for the fact that the first one had trouble. They eventually got there just before 1 a.m.

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There has been some criticism about the evacuation of people from some places. Can you tell me anything about the evacuees from Dwellingup and the outlying farms? Did the police receive any reports of any criticism?---Quite a lot of the people came into Dwellingup and then, when Sergeant Harris and party arrived there in the morning per medium of the rail trolley, the people were all on the football oval in the centre of the town and the evacuation plan was then abandoned. Prior to that, they could not get out along the road because that had been cut off, but with the assistance of the Red Cross and the police the road was cleared and all those people were evacuated into Pinjarra. Our information was that many of them were going to North Dandalup, hence our arrangements to send a police team to North Dandalup and we also sent the Red Cross there. They were going to stay the night there, but eventually all the evacuees were sent to Pinjarra.

Do you know if the people objected to being evacuated?---No, not one bit; they were all quite happy to go.

We heard evidence from one party that there were certain objections to evacuations in the Margaret River district?---At Karridale there was with some people, but I have discussed that position with Constable Sparks since and I have also had the district inspector look into the problem and they were quite convinced that it was far better to err on the side of safety and get those people out. We did not want a repetition of what happened at Dwellingup. It was fortunate that we had that big area in the centre of the town at Dwellingup to which the people could go.

The evidence is that wherever the people were evacuated from their homes in Dwellingup the homes were burnt, but in those cases where the people were not evacuated their homes were saved as a result of them being sprayed with hoses and things of that sort?---That is a decision that the constable had to decide on the

spot. If he took the risk of leaving them in their homes and they were burnt, where would he stand? It was far better for him to err on the side of safety. There was also a lot of criticism over the evacuation of people from Carnarvon during the floods at that time, but, there again, if the flood waters had come down the people would have been washed out to sea. I would much rather err on the side of safety when it is a question of lives to be saved. At Karridale I feel sure it was the safest thing to do. The constable could not possibly foresee that if they stayed in their homes the places would not have been destroyed.

I have not conducted exhaustive investigations into the matter, although I have made a quick visit to Dwellingup, but it was stated that people had been evacuated to a building where petrol and other explosive materials were stored?---My information is that that is not correct at all, and my further information is that when the postmistress and the people conducting the store at Karridale communicated with the Margaret River police they were already moving out in the interests of safety. They advised Constable Sparks at Margaret River. They had made up their minds to evacuate before he got there and they were local people living there, so they should know.

I was interested in the use of these oil company tankers to which you referred. They were used, I think, at Margaret River, but they were definitely used at Gidgegannup and one was used at the Chittering fire. I was wondering who got the idea to use those tankers?---The oil companies formed a committee among themselves, with Mr. Knox as chairman, for the purpose of providing these tankers to the State Emergency Committee when they were required. Mr. Lonnie arranged it with the South West ones at any rate, but we did have one or two at Chittering and several at Gidgegannup, and with the South-West fires, the oil company contributed one. We had 10 or a dozen altogether at the time. The scheme originated with Mr. Knox. He, and the members of his

committee, represent all the major oil companies. It was he whom we of the State Emergency Service had to ring when we wanted a tanker. He also had to give directions to the oil company at Bunbury. They did not have to send them from Perth, but got them from the local depots at Bunbury.

Some witnesses have said that they were dissatisfied with the help they got from the police cars and their mobile wireless sets at the Gidgegannup fires. They said that the messages they received were misleading and that they got better results from using motor cycle patrol men. I have not any evidence as to why the information from the police cars was misleading?---I saw the report of that evidence and I had some extensive inquiries made to ascertain whether that was so. From the reports I had from the inspector and the others that were up there it would appear that the information sent up from time to time to control headquarters at Midland Junction, originated from various fire control officers whom the patrols contacted. I have read their reports, and they would employ a patrol officer who would tell them and he would also pass the information on to the central control centre at Midland Junction.

Owing to the nature of the country they had to keep moving one car to a position where they could maintain wireless contact. There was a relay station set up, but on account of the ironstone formation in the area the wireless communication was seriously hampered. They therefore had one relay station at the top of Red Hill. Their work was taken up in answering calls to evacuate people from various places and, mostly, their calls were from fire fighters who said, “These people should be taken out from here”. The police did that, but objections were raised on account of lack of information. I would like something more specific as to what misleading information was given. As far as I can ascertain the Police Force cars carried out a very useful service. Inspector Croker at Midland Junction asked for assistance and I sent up four or five motor cycles to assist in

running round on wireless communication on account of the difficulty the wireless cars were having with poor reception because of the nature of the country.

I can understand that. I presume that your car wireless sets have not a wide range?---In some areas they are quite effective up to 200 miles, but in other areas they have a range only up to about 10 miles. In some areas they had a complete blackout. That happens frequently, particularly in forest areas.

I was concerned with the possibility that that type of wireless equipment was not satisfactory, or that the general system was not satisfactory where the members of the wireless car would not, perhaps, have very good local knowledge. A man might come along from a fire fighting gang and tell them something which would easily be misunderstood because the members of the wireless crew would not know the country as he would know it. I will, however, make some further inquiries into the nature of the misleading information?---Yes, I would be glad if you would. I have made inquiries from the reports, and as far as I can gather any information that was passed on was from fire fighters and local authorities. Just what that was I cannot say.

It seems to me that the situation would be the same with the police?---That is all they could get. Unfortunately Inspector Croker, who was in charge of the operation, is away in the Eastern States on annual leave.

Evidence has also been given that the officers of the Forests Department were appointed to assist Inspector Croker at Midland Junction. I understand the first forestry officer arrived there at 12.45 on the 2nd March and was relieved by another at 7 p.m., and the first officer took over at 8 o'clock and remained on duty until 5 o'clock that day. Some doubt has been expressed whether this arrangement was satisfactory. Can you give me any evidence of dissatisfaction that was expressed with the services of each or both of those officers?---Here again I am in difficulty due to the absence of Inspector Croker. I have enquired from my officers and they say there was no dissension between the Forestry Officers. There was some question of the line of demarcation between the Bush Fires Brigade and the Forestry Department.

I do not think it was dissension between the two forestry officers concerned but dissatisfaction of the other people at the fire with the result of their work as people in charge of that section of the fire?---I have not heard anything about that.

When will Inspector Croker be back?---About the end of this month. I will refer these questions to him and arrange to have him called if necessary.

As you know, there are arrangements under which the Minister can put anybody in charge of a fire, and I think it was under those provisions of the Act that he called for assistance from the Forests Department?---Inspector Croker rang me at about 1.30 in the morning and we arranged for assistance to come up and for it to be based at the Inspector's office at Midland Junction.

Can you tell me on how many occasions the services in charge of the S.E.S. were called into force for fires?--The State Emergency Service was called in to assist at Dwellingup after the destruction. Prior to Dwellingup being destroyed the Police Department was called in to assist with communications. Following that destruction the State Emergency Service came into action to provided a relief officer at Gidgegannup. We brought the State Emergency Service into operation when assistance beyond the capacity of the local people was required. The State Emergency Service came in when the fire got out of control at Gidgegannup. It came in to deal with all the major fires in the South-West area and it was also in on this.

That is the Margaret River-Karridale fire?--Yes. They were concerned with the major fires. In this case assistance was sought by Inspector Meyer where fires were becoming dangerous. For instance, there was danger that Northcliffe would be destroyed and he sent a man there to keep an eye on things and, if necessary, to arrange for the evacuation of the civilian population.

But no action was necessary in that case?--No. The State Emergency Service actually came in on all these major forestry fires, such as Gidgegannup, etc. We also helped at Mandurah.

Do you know if you were called in to the Chittering fire?--No; that was handled by the Bush Fires Brigades Board and the Forests Department.

I understand they had the services of the S.A.S. men of the military?--You mean at Chittering.

Yes?--That would have been arranged through the State Emergency Service. I did make an arrangement personally with Western Command because they wanted one line of communication to them.

Were you concerned with the transfer of men from the Collie district to the firefighting areas?--Yes. Inspector Meyer asked for further assistance on behalf of the forestry officers and I communicated with Mr. Lonnie, in the Premier's Department, and he obtained authority from the responsible Minister -- I think it was Mr. Court -- to take any of the men on Government work at Collie who might be required. They were obtained and I passed the information on through Mr. Meyer to the forestry officers of the area and they made arrangements as to their disposal.

We were advised they did some very useful work, particularly with one of their men as leader. He only had to tell the men what to do and they obeyed him without question. One witness did express dissatisfaction at the behaviour of a body of these men at Kudardup. Can you give us any information as to the reason for this dissatisfaction?--I had the District Inspector at Bunbury look into that after I heard the evidence, and he went down and enquired into it. He reports to me that the Collie miners did very good work. There is a mention by Constable Sparks that he at one time went to some firefighters and discussed who actually was in charge or control of the fire-fighters. He told the men that Mr. West was the fire control officer and to take orders from him. This incident took place when these miners were billeted in the local hall. It would refer to the line of thought that you put up that when there was a shortage of a leader and he told them to take orders from Mr. West, they did very good work in the area and obeyed him. That is the report I got.

He received no complaints?--No. I looked into that and the Inspector reports that there was an incident at Kudardup where the miners were billeted in the local hall. It seems that a party of them who were then off duty at the conclusion of the day's firefighting, obtained a keg of beer from Augusta but he has no knowledge of

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any unseemly conduct resulting. No report was made to the police regarding any disorderliness by these men. In fact, the Margaret River police did not even know of the beer drinking until they heard of it casually about a fortnight later. My own view is that if the conduct had been as bad as stated, surely some report would have been made to the local police!

I am not interested in whether they drank beer or not; I merely want to clear their reputation if it is not correct?--They apparently drank the beer, but nobody sees any harm in that, after a day's firefighting. There was no case of misconduct. We had a constable at Augusta, right in the vicinity, and surely they would have heard of it. Constable Sparks says that he heard nothing about it except by rumour a fortnight later.

Coming back for a moment to the State Emergency Service, is there any direction in which you have experienced difficulty in obtaining the assistance you wanted?--None at all. I have had the utmost co-operation from everybody. We have had volunteers offering to assist. The Red Cross co-operated to the full, and the

three services -- Army, Navy and Air Force -- made available whatever they had at the shortest possible notice, as did the oil companies and many private firms and other people. I did list some of the services which we provided to the various operations per medium of the State Emergency Service. It is as follows:-

> Police radio vehicles for communications.
> Additional police, including motor cycle patrolmen to assist in rescue and evacuation; controlling of sightseers.
> Keeping roads clear for movement of essential vehicles.
> S.E.S. also sought and obtained units for fire fighting from Army, Navy and Air Force. Obtained and despatched supplies of tents, flys and blankets for use by evacuees. Alerted Red Cross and worked in close liaison with that organisation. Arranged with Public Health for medical and first aid teams. Secured water tankers from oil companies. For the Mandurah fire, a fire fighting unit from the B.P. Refinery.

I rang the General Manager because we ran out of fire fighters and the Mandurah fire broke out. He immediately despatched about 50 men from the Refinery to us. We also maintained a very close liaison at Governmental and ministerial level to provide immediate relief.

Did you ever receive requests for materials or equipment, or anything of that nature, which were not available in the State?--Not in connection with that fire. I did receive some request in the Carnarvon floods. A request was made for a helicopter which would have been handy. The Air Force did offer to bring one over if requested. Any request which I or Mr. Lonnie made met with the utmost co-operation.

A suggestion has been made that either road boards or a central authority such as the Bush Fires Board should be equipped with wireless sets with five channels so as to cover the Police, Forestry and Army ranges. There might be objection to other people using these wireless channels -- people like these who only occasionally have to make use of these frequencies?--If these channels were to be used only in emergencies, and used only under strict supervision we would not object. To use them indiscriminately on other occasions would

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jam our channels of communication. We all realise that one of the main requirements in any of such emergencies is good communications. We would be prepared to co-operate on the understanding that these people would confine the sending of messages during emergencies. There would have to be strict control.

The other alternative is for the Police, Army and the Forestry to have a separate channel through which to communicate with the bush fire organisation?--We have a portable transmitter which has a crystal, and through which we can communicate with the Forestry and vice versa, but there is no such link with the bush fires organisations.

One of the terms of reference is to suggest the basic requirements for a bush fire emergency service. Would the State Emergency Service meet that requirement, or would a separate service be required, or would some adjustment of the present set-up be required?--I understood all along that the Bush Fires Board filled this role from the fire point of view. It is part of the State Emergency Service and it is an organisation linked with that service. It seems to me from my experience, and from what we heard in this Commission, that that board has need of an executive officer of high status, possessed of considerable powers, to co-operate the fire fighting services. I do not know to what extent the secretary or officer in charge of the Bush Fires Board can fill this role. It does seem necessary to have someone in that capacity to direct that this or that should be done. We have discussed this aspect at the State Emergency Service, and we are to have further discussions at the conclusion of this Commission.

Could this be extended to take in other emergency fires resulting from enemy action? Can you tell me if the State Emergency Service covers that in a general way?--Yes, we cover any emergency whether it results from bush fires, any other fires such as that caused by an aircraft crashing into a building and starting a

conflagration as happened recently in the U.S.A. That is one emergency when the State Emergency Service would come in, irrespective of the cause of the emergency -- whether by fire, flood or cyclone. The Bush Fires Board and the Forests Department Fire Fighting Service are part of that organisation. It could happen that in some other type of fire -- not a bush fire -- we would call for their assistance. We could call in the experts from the Forests Department to assist in some other role. They would be available because they form part of the State Emergency Service.

If war broke out a certain amount of civil action would have to be taken for the protection of the inhabitants from fires arising from enemy action. Is the State Emergency Service meant specifically to deal with such an emergency, or does the whole service go into the melting pot once hostilities begin?---We are beginning to link up on the lines of the civil defence services. Most of the officers have been trained at the Civil Defence School at Mt. Macedon. Mr. Lonnie, who is the head of the State Emergency Service, is Deputy Director of Civil Defence in this State. That is the line we are taking, to form it all into one type of service to operate in times of peace or war.

Another term of reference is to suggest measures which might assist in the future in protecting life and property from the consequences of bush fires. As a result of reports from your officers I wonder whether, from what happened in recent fires, you yourself have developed any ideas in that direction?---Only that there should be an officer of higher status. I did make a few notes so far as the Police Department was concerned. They are as follows:-

> 24. So far as the Police Department is concerned, as I have already said, the protection of life and property is our prime duty, and I feel that in all these recent emergencies police have been fully cognizant of this fact and have carried out their duties very efficiently. Although there have been suggestions in some circles of criticism regarding evacuations, I do not consider that these criticism are warranted. It is very easy for some people to be wise after the event, but I would far

> sooner see the police, in these circumstances, err on the side of safety. Otherwise I could only, perhaps, suggest a complete overhaul of the whole fire fighting arrangements, together with some firm control, as there appears in the recent fires, regarding the actual fire fighting, to have been a great deal of confusion and lack of co-operation between the various local authorities controlling the bush fire brigades. I further feel that it is an essential that the control officer in any area should remain at his headquarters during the period of emergency.

We found on a few occasions through the State Emergency Service that we were not able to get hold of the man in charge in a particular area. He was out directing or assisting fire fighting. On one occasion only a girl was in the office and she did not know much about the situation. That is why I make the suggestion that the officer in charge should remain at his headquarters. He could have runners, and if he was short I could provide him with a few motor cycle police officers for that purpose, that is, if his communications were down, to take messages to

the various quarters. I fully realise, as does everyone else, that in these emergencies everybody tried to do their best. Naturally some things went wrong, as in every war that is fought. It was something not experienced in this State before; there were such a lot of dangers all at once, and everybody was doing the right thing from all departments, but things do go astray in times of emergency, and resources are strained to the utmost. We struck a patch with floods, cyclones and fires at the same time.

There are times when the enemy will not do the right thing?---Yes. I think criticism has been levelled here and there; and that will always be, no matter what the emergency is, or what the war is being fought for. We have read so many criticisms of what generals have done and what generals have not done. Things do not go to plan. We all understand that. I feel that everybody gave of their best and tried to co-operate. Naturally, they were not quite perfect.

Is there anything else you wish to speak about?---I do not know whether you wanted information concerning prosecutions under the Bush Fires Act.

Yes?---Our normal line of procedure is to report breaches of the Bush Fires Act to the local authority. In serious cases we can go out, and we have prosecuted sometimes under the Bush Fires Act. However, if there is evidence of criminal negligence we can make a charge under the Criminal Code. In the Criminal Code there are provisions, apart from arson, which provide that any person who wilfully sets fire to a crop, standing trees, saplings, or shrubs, has committed a crime and the offender is liable to 14 years' imprisonment. Under the Criminal Code we can charge a person with wilful damage to property, and he is liable to imprisonment for three years. This is a misdemeanour and the offender can be dealt with summarily.

I have been informed that when a local authority prosecutes under the Bush Fires Act the fine goes into the coffers of the local authority?---That is correct. That applies to any Act under which they prosecute.

I was wondering whether there was, not an understanding, but a feeling by the Police that perhaps they should best leave these matters for the local authorities rather than take action themselves?---When this Act first came in a few years ago an arrangement was made in regard to minor actions with the previous Commissioner -- Commissioner Anderson -- that the Commissioner of Police would report breaches of the Bush Fires Act to the local authority in order that it could prosecute. However, I doubt if this was done with the intention that local authorities keep the fees, particularly as there are only a few prosecutions. We have the same thing under the Traffic Act, and in local by-laws. Although the same offence is covered under the Police Act and the Police could prosecute, normally, where there is a by-law, we report it to the local authority in whose area the offence occurs. If they do not want to prosecute and they feel the Police should do so, then we do it. If it is a major offence and comes under the Criminal Code, we would take the action.

It does seem fairly obvious to the Commission at the moment that there are a lot of breaches of the Bush Fires Act for which prosecutions are not launched and, although one does not believe in pushing prosecutions every time somebody breaks a minor regulation, the efficiency and effectiveness of the Bush Fires Act could be reduced if a lot of persons in the community thought there would be no penalty for breaching it. That is a point which is concerning me at the moment?---I agree that there are too many breaches. I will reiterate these instructions again to the Police. I feel they have learned a lesson from last year's fires which got out of hand,

and they will realise they must be firmer on the control of breaches of the Act. I must agree there does not seem to be enough.

If we need a report, say, of the Chittering fire you would have no objection?---I have no objections to that. We will have a copy of it. I will find out from the Coroner what the position is. I think it is a question over damages. There is a lot of discussion going on between the insurance companies and damages claims, and so forth. I fancy that is the hold-up at the moment.

(The witness retired).

BY THE COMMISSIONER: Just one or two questions have arisen as a result of evidence that has been given, and the major one was the question of control at Margaret River. A lot of people called have said you took charge of the business when the Forestry people walked out to go to the Treeton fire as they had to do, but apparently some of the local fire control officers appeared to feel as though that had not been the right thing to do, and I think it might be advantageous if you could tell us what caused you to take charge of the situation and under what circumstances you handed over?---At no stage did I ever control bush fire operations. I was mainly concerned with the dispersal of men to various danger points of which I was notified either by 'phone, until that communication gave out, or by personal reports. When these reports came to me I ascertained how many men I had on hand at the crossroads, which had been referred to, and these men were dispersed to these danger points. At no time did I have anything to do with the actual control of the bush fires or bush firefighting.

Just the allocation of men to various areas?---Yes.

You did not take any men away from a particular fire control officer and send them somewhere else?---

?---I believe that that has reference to an event which occurred at Nillup or Alexandra Bridge. That is the area to which I first went. I got the report of the fire from Alexandra Bridge and I collected five men from Margaret River townsite and took them to the fire area in my vehicle with any equipment that they could lay their hands on such as knapsack sprays. Upon arrival I ascertained that the fire had already burnt through Alexandra Bridge-Nillup area and in my opinion the danger to houses and life was passed. Therefore I took these five men -- the same five I had transported to the fire area -- with me to Karridale. I considered that the danger there was greater and that there seemed an ample supply of men at Nillup; and besides this, these men had no other means of transport. Therefore I took them down there and they relied on me to take them back if necessary. Therefore I transported them to Karridale which actually proved fortunate. Upon arrival at Alexandra Bridge -- seven miles east of Karridale -- I received a report that the Alexandra Bridge timber mill was endangered. It was fortunate that these five men were on hand and I transported them to the mill and the blaze was controlled. We more or less burned around the mill and helped there until it was out of danger and then continued on to Karridale. At Alexandra Bridge mill there were only about three or four men to control the whole fire and they had been fighting for four or five hours and were almost on the point of exhaustion. I think it was fortunate that those five men and myself were available. Upon arrival at Karridale these five men we employed on other fire-fighting business.

Did you have any association with the Collie miners arriving at Karridale?---Yes. Later in the afternoon on Friday, the 3rd March, the Collie men arrived. There were 50 of them, ten being carried in each of the five trucks. Upon arrival these men were dispersed to known danger points which were given to me as the points where men were mostly required.

They were independent were they and under their own leaders?---Actually they had no set leader. The

truck driver seemed to be the man in control in each instance and really they did not seem to have any set leader. They were of course, once on the scene of the fire, then supposed to have worked under the man in control of that individual fire.

I have received advice that two men with a power saw and travelling in their own utility arrived at Karridale and found no one they could report to. The statement was made they went as a result of a police call at Collie but when they got there they could find no one to report to. They spoke to several people they thought in authority but finding no satisfaction they left and returned home?---I think they may possibly be confusing the Karridale control point. There were three actual points of control. There was one at Forest Grove on the property of Mr. Noakes. That was more or less the northern end of the fire. There was one at Karridale which was more or less the centre of the fire, and one at Kudardup, where the fire was eventually stopped, on its southern part. I cannot imagine that there was any stage when there was no person who could not have told them where to go with a power saw. If I was not there, there was certainly someone else there. Mr. McDonald, who owns the house, would not have been very far away. I did hear a rumour that some men had turned up at the Forest Grove centre, and it is possible that all personnel at that centre were out fighting fires. Until Mr. West was made the controlling officer at that point, there did not seem to be any person in control really.

What sort of equipment did the miners from Collie have? Pretty good equipment, I suppose?---Knapsack sprays mainly, but there were not enough of them of course. As far as I can remember there was one knapsack spray to every two men. They had shovels, of course.

They probably came from the Forests Department?---Yes, probably.

Some of them have said that they were used on clearing roads. I may be wrong in this. But I got the impression from the way it was said that they felt it was not quite worthy of the job they were capable of

doing?---If they were -- which they undoubtedly were from time to time -- I would consider that that is a very important aspect of firefighting. The roads must be kept open. There are not a great number of roads in the area and at times they were all blocked with fallen trees. Well, we had water tanks and vehicles carrying men and firefighting equipment and all that sort of thing, which had to use the roads to get from one danger point to another at various times. If the roads were blocked, then the men and equipment were delayed. If at times they were employed on clearing roads, this was only done when necessary. They certainly did not do anything unnecessarily.

Well I do not think there is anything you can help us with. I am glad to have had your personal explanation as to what happened down there. There is one point I think you have not quite cleared up. According to one report you had -- I think from Detective Walter -- there was certain dissension amongst the fire controllers. When you heard of it you went along with Mr. West and explained the position?---Dissension is a harsh word under the circumstances. The Forest Grove control point was operated from the house of Mr. Noakes. From memory, he is the captain of one bush fire brigade down in that area. But Mr. Noaks requested me to see if I could do something about the control of that point. There were men there who did not seem to recognise his authority and also he stated that he did not feel like giving men orders under the circumstances. I do not say that he was shirking his duty, but after all he is only a farmer, and for a farmer to take control of a couple of hundred men is sometimes quite a task. With his knowledge of the area and fighting bush fires, I tried to combine that with the authority which Mr. West held down in that area, and I explained to everyone concerned that Mr. West was to operate with Mr. Noakes and they were in control, and that did work out quite well.

R.J. SPARKS,

Ed/Bly 23/5/61.

Thanks very much. I do not think there is anything you can help us with unless you have some ideas of your own with regard to fire control?---I would rather not talk on fire control myself if I can possibly help it. I am not conversant with it enough to talk about that matter. However, if I can believe reports in the Press, I am apparently being criticised for the evacuation of people in the Karridale township.

I do not think your name was mentioned?---No, but under the circumstances I was not actually responsible as Mr. O'Brien said. Some of these people were already on the way out when I got the report of the seriousness of the fire.

At that stage I suggested that they all leave the place; and at that time there was no dissension. Nobody wanted to stay. If they had, I would have allowed a couple of reliable men to remain in the town if they wanted to, and I thought they could be of some help, and I thought they would have been quite safe. It was also stated that had two men remained in the townsite of Karridale, that quite a number of houses, or buildings, could have been saved. That is not quite right at all; I definitely disagree with that. An army of men could not have saved the fire from doing the destruction it did. Maybe they could have saved one or two houses, but the main damage was caused when the store, the old hospital, the church and the hall burned. From photographs, which you possibly have in your possession, you can see that even after the fire there was evidence of the dirty bush that surrounded these buildings; and, as I say, I do not believe that the best equipped fire fighting forces in the world could have been able to save them.

I don't know what buildings were referred to, but actually we have heard evidence to the effect -- I do not think it referred to Karridale, but to some of the farms -- that where people left the farms, the houses were burnt, and where anybody was left they were saved. Anyhow, I do not think I would regard that very seriously. We have heard one statement to the effect that it was found necessary for the police to forcibly eject people from their homes. One story is told that the police had to arrest a couple of them to get them out of their homes?---No, that is not quite right. There was one, a Mrs. Bushby: I was assisting with fire fighting operations on a neighbouring farm of Mr. Bushby's at Karridale, and the report came to me that the Bushby house was in danger of the fire. I went to that house and I found Mrs. Bushby -- an elderly woman; she would be about approximately 70 -- making a cup of tea while fire fighters were more or less running around and engaged in the operations. I suggested that she accompany me to the neither by cross-roads until the danger

passed. She was not forcibly removed; but I strongly suggested that she come with me. Fortunately, the house was not destroyed and shortly after Mrs. Bushby returned of her own accord to the house. But she was certainly not forcibly ejected, or anything along those lines, and under the circumstances I still consider that I did the right thing.

Was there anything in the story that people who were evacuated were taken to a site on which petrol and other inflammable material was stored?---Yes; but that is not exactly correct. The house on the cross-roads is owned by a Mr. McDonald, and it would be situated in the centre of an area of about 2 acres which is grassless. It has a yard which has trucks -- he is a cartage contractor. The fuel drums are situated at least 50 yards away from the house and at least another 50 or 60 yards away from where the fire could have possibly got; and under the circumstances it was the only place they could have been shifted to. Their furniture was packed on the back of open semi-trailer trucks and it was unwise, I considered at the time, to have them taken through the fire along to another road, through the fire area, where a spark could have done quite a bit of damage to this furniture.

BY THE COMMISSIONER: Can you tell me what time the fire went through Karridale; the township itself?---No, not exactly. It varied. I would say, probably about 2 p.m. - 1 p.m. to 2 p.m. it could have gone through. That is only from memory, and I could be corrected there. If that is so, the petrol dump at the store did not explode until dusk -- about seven o'clock.

I was thinking of the head of the fire. At that time, if it did not go through Karridale, at what time did it pass it or reach it?---I could not say that without referring to my report.

At what time did you evacuate the people from Karridale itself?---The nearest I could say would be about lunchtime. At the time I was concerned with many other matters. I would say, roughly 12 clock.

Where would you say the head of the fire was then?---The post mistress to whom I was talking on the 'phone -- actually it was the last 'phone call to be made from her office -- stated that she could hardly hear me through the roar of the fire, which I could hardly believe, although it could have been within half a mile. With the density of the Karri timber in that area it would make quite a bit of noise and much smoke. There was no report to hand of just exactly how far away the fire was. But they were getting out, so I suggested the remainder of the township should leave.

(The witness retired.)

THE COMMISSION ADJOURNED.

WEDNESDAY, 24th MAY, 1961.

GEORGE WILLIAM MACKEY, 38 Connolly Street, Wembley, Deputy Director, Bureau of Meteorology, Western Australia, Sworn and Examined:

BY THE COMMISSIONER: You have prepared a statement of the meteorological conditions during the fire season of 1960-61?---Yes.

You have, of course, presented that statement to the commission and, normally, any evidence presented in that way is read by the witness presenting it. However, as your statement contains all factual information and is scarcely open to argument I do not think I will ask you to read it. It is material which is difficult to follow and, if it is satisfactory to you, we will accept it as being read. I will, however, ask you some questions on some matters that perhaps have not been covered.

EXHIBIT Exhibit A8 Statement of Meteorological conditions, fire season 1960-61.

As a commencement, you say in your statement that the fire hazard forecasts for the 1960-61 season were commenced on different dates according to whether they were for the W.A. Government Railways, the Forests Department for the jarrah forest area, the agricultural areas for broadcast over the national and commercial broadcasting stations and for the Forests Department for the karri forest area?---Yes.

Obviously, that has some relation to the time when the season is likely to become, perhaps, not dangerous, but become inflammable?---Yes.

I was wondering why the fire hazard forecasts for the Railways were so early, on the 17th October?---I cannot tell you exactly why the Railways decided on that, but we commenced the forecasts on that date as a result of a request from the Railways Department. I understand it has to deal with their operation.

I would expect it would have to do with their burning operations along the line?---Yes, and also the type of coal being used.

I was just wondering why the agricultural areas, through which the railways pass, were given their forecasts a fortnight later than were the railways?---It was simply a matter of the railways asking for the information for their operational purposes. At that stage it was not felt necessary for the Forests Department to ask for its forecasts immediately, and seeing that the two are tied together, the opening of the general broadcasting of messages was delayed until the same time as the others.

The opening of the general broadcasting of forecasts is about a week later than the forecasts for the Forests Department?---The first one was only for the jarrah forest area and the second one was for the karri forest area. The forecast for the southern area was about a week later.

I would have thought that the agricultural areas would require their broadcasts on fire danger as early as the forecasts for the Forests Department for the jarrah belt?---At that stage; that is, the third week in October, the drying-off process had been accelerated because around that time there was a very hot couple of days during the last week in October which accelerated the drying-off process. Also, there was no specific request made for the commencement of the fire hazard forecasts. Usually, we start the fire hazard forecasts round about the time the forest areas hazards have started.

Like most professional people, you use terms that probably carry a shade of meaning of which you are aware, but which laymen do not appreciate. For example, under your subheading of "Form of forecasts", you speak of a "synoptic situation". Does that mean anything more than a general situation?---It simply means the pressure contour pattern as fixed.

It automatically refers to the pressure contour pattern?---Yes, and the weather associated with it.

It is, peculiarly, a meteorological expression?---In the strict sense of the word "synoptic" is not, because it simply means simultaneous.

Then you say, in the same paragraph, "a prognosis of the future situation". I would appreciate if you would explain the difference between those two?---A prognosis of the situation is simply a statement of how the existing situation will develop according to its pattern. The forecast of the anticipated weather is the actual weather development resulting from that pattern. It can be likened to a doctor who forecasts or diagnoses the trend of a disease and then forecasts what will happen to the patient, so that he can administer medicine. In the particular case in point, when I use that word, actually the idea is to give the Divisional Forester some idea of how we are anticipating the pattern to develop so that he can understand why we arrive at a specific forecast.

I presume that the news is established and it would also enable him to see the forecast in a little more detail?---It does allow him to see it in much more detail.

You speak of the forecast being given over the A.B.C. twice daily. Do you also put it over the television stations?---They would be included to some extent in the television presentation, but that, of course, would cover only a limited area. But what the A.B.C. gets covers the whole area. The forecasts are also put over the commercial stations, but, there again, the forecasts are only for the area covered by the respective broadcasting stations.

For the purpose of circulating the information to certain quarters, television would be limited only to certain areas?---Yes, television definitely has only a very limited range.

Speaking of thunderstorms and lightning, is there any records which show that some districts in the State are prone to lightning strikes more than others?---There is a map giving the average frequency of lightning taken over relatively short periods of years and that does indicate that certain areas of the State have a higher frequency than others.

You mean of lightning strikes?---No, of thunderstorm activity. It would not show except by inference the preferred areas of lightning strikes. But of course these would be in higher country, where there was some particular reason for having a path for the lightning. There is one good example between Perth and Northam on the brow of the hill. You get more thunderstorms in that exposed area than in the hollow of the town. You get the same thing on mountain or on highland country. You can get an exposed area more prone to be struck than is an area adjacent to it. A tree on a high plain is more likely to be hit than is a low fence.

The actual occurrence of thunderstorms would not be so localised as the lightning strikes. The thunderstorm as a storm can occur anywhere?---So can the lightning strike occur anywhere where the thunderstorm occurs.

You mean there is no greater liability of strike in ironstone country than in sandy desert country, apart from the tree heights?---There probably is in ironstone country. It would be like a lightning conductor on a building. Where there is something standing out it automatically strikes it. There are preferred areas here. For example, along the Darling Ranges they get far more thunderstorms than we do in Perth. We can see thunder and lightning on the edge of the plateau, but there is nothing in Perth.

Is the Dwellingup district known as a bad lightning area or a bad thunderstorm area?---No, because I doubt if there are sufficient records in that region to show that the Dwellingup area is more prone, or is a more preferred area than any other part. But purely as a matter of opinion I would think that some of the area, not

actually in Dwellingup itself, but a little north of Dwellingup where there are one or two high points would be preferred areas and would get a lot of strikes. There is no information on that because there is nobody living there.

In Appendix 6 (Exhibit "A8") you give forecasts for February, 1961; for three days of February, 1961 -- the 26th, 27th, and 28th. And none of those forecasts for whatever district suggests the likelihood of rain. Yet in the evidence we have received we have consistently found witnesses from the lower south and the karri districts saying they were anxious to burn off on the 27th and 28th, the first days after the burning season opened, because rain had been forecast?---Those forecasts to which you refer are the actual fire hazard forecasts, not the general district forecasts. It will be noted in those that on the morning of the 26th the forecast was dangerous for the coastal area down to about Margaret River; severe elsewhere around the karri forest area, other than on the coast. In the afternoon it was given as average to high on the south; high in the karri area, and severe -- indicating a slight decrease. I have here the actual forecast issued on the 27th February. The actual forecast issued for the lower west coast at 5.30 am on the 27th February was fine, warm and humid, with wind becoming west to south west early -- indicating a sea breeze. But there was no specific reference to rain.

Would you have the forecast for the 26th -- the day before the season opened?---No, I have not got the forecast for the 26th and I cannot offer an opinion on that. There was definitely no reference to it in the morning

forecast for the 27th February. They would not have included rain in a dangerous forecast, and so eliminate the fire hazard. I have my doubts whether they would have put in rain in the afternoon forecast, because they were still maintaining a severe forecast. I shall obtain that forecast in due course.

On the 27th you say there was no rain forecast?---Not in the morning. That part to which I referred related to the area down to Bunbury. The outlook for the future period on that morning was hot and unsettled. That for the south coast at the time was warm, humid and unsettled.

We are dealing with Margaret River. Is that on the south coast?---It is just on the boundary of the two. For the lower west coast in the afternoon there was reference that day to possible rain -- sultry, with periods of rain and scattered thunderstorms. On the afternoon of the 27th that would be the first reference to rain.

Have you the forecast for the 28th February?---On the morning of the 28th the forecast was sultry with patches of rain and thunderstorms, further outlook unsettled. On the afternoon of that day it was sultry, with some rain developing, and further outlook rain.

Have you the forecast of the 1st March?---Yes, it was sultry with rain developing in the early morning in the south. The point about that, in comparison with the hazard forecast, was that the forecast hazard for the 1st March was severe to dangerous, whereas the forecast was rain developing and further outlook cooler. Those two, taken together, indicated that the forecaster was thinking in terms of rain later in the period and thus becoming cooler at the end of the period, and that the dangerous fire hazard would occur before the rain.

There was no mention of high winds?---Yes. With the fire hazard forecast on the 1st March the winds were coming from the north-east at 20 to 30 miles per hour, and squally. The force of 30 miles per hour would be getting towards gale force. At the same time on that morning a fire warning was put out and indicated that attention was drawn to a dangerous fire hazard in the central west coast, central east, and north-east agricultural districts.

Speaking of winds, a statement has been made to this Commission that gale force winds are much more common in the summer nowadays than they used to be, owing to the destruction of timber. Would your records give the change in winds recorded at ground level over the years?---No. It is only natural that if a wind shield is removed, whether it be a wall of a house or anything else, the person standing behind that shield will become more exposed than before. Apart from that artificial alteration there would be no change in the general wind structure.

Do you find that people frequently have a misconception to that effect; that when they were youngsters going to school they were nearly blown off the road, but when they got older they were not blown along the road. Is that a common experience?---It is not only common but happened to me. It is a psychological reaction on something which impresses on the mind of a person when young. There was a yachting fatality on this river in February 1916 as a result of severe thunderstorms. For many many years, until I came back here in 1949 as Deputy Director, I had the impression that February was really a bad month for thunderstorms in Perth, whereas in fact we get more thunderstorms in the winter. That was my own reaction to an individual incident, and the same happens practically to everybody. You requested the forecast for the 26th February. If I could ring my office I could direct that forecast to be brought here straight away.

Your later comments, when you said that rain was forecast on the 27th and 28th, would cover that point. One of the matters which concern this Commission is that local authorities have power to change the opening and closing dates of the prohibited burning season. How would the local authorities get information or adopt a formula which would give them some indication, say a week before the normal end of the season, as to whether they were likely to have bad weather and should extend the opening date of the burning season?---I do not know on what grounds the opening dates of the burning season are established. That being the position, I could be completely outside my own sphere in giving an opinion, but I feel it would be better to tie this opening date to something in the nature of the opening date of the growing season. That is a period when reasonable rains can be expected in the district. There are probably a number of reasons why that cannot be done. This is a personal viewpoint of mine.

Probably it is the personal observation by local inhabitants and that sort of thing which has fixed the dates in past years. The difficulty is not in getting the average date, but in getting date to fit an individual year as it comes along for instance, last year some people say that local authorities should have extended the opening

date of the burning season. On the other hand, many people were pleased with it, especially as rain was forecast and they rushed in and got their burning done immediately the season was open. Looking back, it is easy to say that they should have extended that date. Having fixed the date, they will not change it unless there is something to indicate that the season will be different from the average?---I am afraid I cannot offer anything more than a few days because for periods up to a week forecasts can only be in the most general terms; and four, five, six, and seven days their reliability is very low. Up to four days they are reasonable. You can actually provide a trend for three or four days in advance. Normal forecasts are effective for three days. The outlook is 48 hours beyond the actual 24-hour period forecasts, giving in effect 72 hours. You can extend that to cover the possibility of a fourth day, beyond that the reliability gets too low.

Let us consider a case that actually arose this year in regard to the Augusta-Margaret River Road Board. They did not alter their dates from what they were the previous year and, I think, had been for some few years. You recall the forecasts of the 27th and 28th. Had they got in touch with your institution on the 24th would it have been possible for you to have given them information that would have caused them to extend those dates?---If they had rung us on Friday the 24th we would have said, "There is a cyclone on the north-west coast, and if you light fires now you are fools." We would have gone on to indicate why we would have considered it foolish to light fires if the cyclone came down the coast, as they do and have done, in March because you get terrifically strong easterly winds and high temperatures.

I presume you would go no further then in time than to say, "There was likelihood of strong winds and high temperatures". Could you go so far as to say, "There definitely will be"?---It would depend on the

proximity of the system, but three or four days in advance we could only say, "The probability is".

I notice on page 13 of your evidence where you give the average date of the opening date of the growing season as determined by the rainfall and the evaporation?---Yes.

You say Nornalup is the third February and there is nothing else near that. Northcliffe is the 2nd March. Is there any possibility of error?---No. Nornalup is, unfortunately, the only place we have along that coast and it is right in the very high rainfall belt. You will note if you look at attachment 11 that the growing season at Nornalup is approximately 10 months. There is a very high rainfall belt just along the coastline there.

I also notice that Albany is very close to the nine months. You have not given the date for Albany?---The season at Albany would be later than Nornalup.

It would be about the same as Northcliffe -- about a month later?---Yes, approximately the beginning of March.

What is the average annual rainfall at Albany?---I do not know offhand. More important, there would be perhaps the frequency of wet days when you get small falls.

There is another way it could be done and that is to not open your season until you have had a certain amount of effective rain, but by that time the average farmer is getting worried that he will not get his country to burn furiously enough to his liking?---Once you experience effective rainfall you get germination and growth starting and you will have green grass in which case if you had enough dry fuel to burn you would burn the green grass off or you would not get what was dry to burn. You will notice on page 14 I gave a table which indicated things called quartiles. This is purely a statistical term and no doubt you are aware of it.

I would like you to explain it. I think I know, but I could be wrong?---In that table there are three

columns. The first column shows the first quartile; the second column shows the median; and the third column shows the third quartile. The median date is the date around which the opening dates are equally grouped. There are 50 per cent. of the dates before it and 50 per cent. afterwards. If you have a very long record the median and the arithmetic average will approach one another closely. The first quartile is the first quarter of the record. In other words, it is that date before which 25 per cent. of the openings would occur, and after which 75 per cent. would occur. The third quartile is the date before which 75 per cent. of the openings would occur and after which 25 per cent. would occur. So that as an indication of reliability, 50 per cent. of your openings occur between the dates given in the first and third columns and 75 per cent. after the first column. My own view -- and this is purely a personal view and not an official view -- is that there could be made a good argument for using the date of that first quartile as a basis for the opening of the season.

That means around Margaret River it would work out somewhere around the 15th March?---Yes. In that case you could expect that one year in four they might get caught.

BY MR. McARTHUR: Would you have any idea of the relative severity of the 1960/61 fire season as compared to the others say, in the last 20 years?---It is the worst that I have experienced, and I have been Deputy Director in Perth since 1949. That gives me 12 completed seasons. This is the worst that I have experienced. Taken on actual temperatures it is one of the worst on record. The number of days when temperatures exceeded 90 degrees in Perth, which would be representative of this coastal region, was 49. I think that was stated in the record.

G.W. MACKEY.
24/5/61.

BY THE COMMISSIONER: I think it is on page 9?---Yes. Thank you. By the end of March we had 49 days with temperatures in excess of 90 and 15 over 100. The previous highest number of days over 90 in 30 years was 48 in 1931. Fifteen days over 100 is either equal to or one less than -- I forget for the moment which -- the actual record days over 100. I cannot say categorically that this is the worst summer because that would mean a computation of the degree, hours or days, i.e. the number of degrees that exceeded the average in each year over a number of days multiplied together. But on those figures it is obvious that this is one of the worst on record -- i.e. for drying. The fact is borne out, of course, by the reports from country centres indicating that by the end of December practically the whole of the State was dry.

BY MR. McARTHUR: That brings me to my second question. How long has your bureau been recording data on the curing of the natural vegetation?---I cannot say actually, sir. I do not know if it is done in all States, but it must be five or six years since we started it here.

That would be about 1954 or 1955?---Somewhere about there, sir.

Do you think that data would be the most useful in determining the proper opening dates of the prohibitive burning period?---I think it could be very useful in determining it with the temperature conditions and the rainfall. The antecedent conditions would have a great deal to do with it. If you have had a dry season all the season then you might have everything dry, but would not have very much in the way of fuel. On the other hand if you had a season with good, early rains which petered out early, and despite a rainfall deficit as we had last year, you had a good season, then, of course, you would have ample fuel which would dry early. These drying reports would give an indication of the rate of drying and how much of the country was dry.

On your returns you also do receive the amount of fuel?---Yes. On the cards we do receive a statement from the observer as to the amount of fuel available.

Several witnesses have complimented your bureau on the accuracy of on-the-spot forecasts received for actual fires in the Gidgegannup and Chittering areas. Has the bureau adequate staff to supply those forecasts on request? I know it would depend upon how many requests you received?---Could I answer you this way? Anyone who rings the bureau and asks for a specific forecast for a particular area covering a fixed time will be given it irrespective of who does it - even if I have to do it myself.

Did you receive many such requests this last summer?---There were a number of requests received. I would not have any ideas as to how many. It is one of the problems in these seasons to get our meteorologist to carry out analysis instead of answering specific requests. It is a thing we have encouraged bodies to do. For example, over a number of years you may have heard that the Cuballing Road Board has done a burn right along the railway line each year. When it is proposing to do that burn arrangements are made to provide a specific forecast for it and I have personally encouraged people to ask for these forecasts because it is much easier and satisfactory to give definite information for a fixed job than to give a short summary. Afterall, if someone rings up and you have three minutes to talk, you can say something like 200 words. If you have to put it over a broadcast, you can say 10 words. In other words, you can tell them the possibilities and likelihood of changes, when they can anticipate changes, and so on. We will always give a specific forecast if we are asked.

I was wondering about one point. You referred to various windstorms which had passed through this area this summer, specifically noting that a wind storm passed through Perth at 7.50 p.m. on the 24th. If the

mechanism had existed I take it that adequate warning might have been given to Dwellingup that such a storm might have passed through that area in half an hour or three quarters of an hour hence?---I doubt if that would have been possible because by the time you received sufficient information - when I say sufficient information I mean a structure of reporting stations every two or three miles to get a micro-analysis of such a situation - the time necessary to analyse the information would preclude due warning being provided in advance. However, in this situation, the mere fact that thunderstorms would be forecast would be a warning of possible severe squalls. In actual fact, on the day in question - or on the following morning - there was a closed pressure system on the south coast which had apparently developed from some such storm which that day had gone through the Perth-Chidlows-Dwellingup area, and there were indications that it affected Wundowie. As a matter of fact, someone in Wundowie reported that they lost a large number of poultry that night due to a severe windstorm. Winds in that could have varied very much too.

I notice in your appendices on the fire hazard forecasts you have given generally a warning when a forecast of danger is given, yet on the 26th February you did not give a warning although you forecast dangerous for the lower west. Yet following that - a little bit further on - on the 6th March you give a warning

when it is only a severe forecast given?---Yes. Well, I can only say that at this stage those are the things that are recorded on the actual written forecast. It is possible that on the 26th February, in view of the fact that he had put out a forecast for the lower west coast of dangerous hazard, that there would have been a warning also. But I can only say that it is possible. It is equally possible that one was not given. I cannot prove it one way or the other. With regard to the second one, similar remarks apply: the forecaster has written the warning down on the 6th March. I have not got that one. It is probable that there he was thinking in terms of the possibility; but without evidence of the actual forecast, again I could not verify.

I know that your bureau has not got anything to do with the implementation of a total prohibition on the lighting of fires. I was wondering if you had any ideas, or thoughts, on the fact that such a prohibition might be brought in for a hazard forecast for severe as well as dangerous. There does not appear to be a great distinction, really, between severe and dangerous, as far as dangerous conditions at a fire are concerned?---Well, it is the function of a Minister of the Crown for the State of Western Australia to decide when they will prohibit. I would not presume to touch his functions, beyond to say this: that somewhere you must have a boundary. What you say about "severe" getting very close to "dangerous" is perfectly true; but if your suggestion was adopted then "high" gets close to "severe".

That is so?---Somewhere you must have a boundary, but I would not like to presume to get into the functions of a Minister of the Crown.

MR. McARTHUR: Thank you.

BY THE COMMISSIONER: When you make these fire hazard forecasts, do you receive and maintain a record of the actual hazards that arise on that day for purposes of comparison, to see how your forecasts compare with the actual?---Yes, from certain stations. We do from the forestry stations; we do not elsewhere. We do at Dwellingup, Pemberton and Dryandra, but we do not in agricultural districts because you have no way of determining. In point of fact, I did have a case once when I was criticised very badly by somebody for a forecast being too conservative. "Dangerous" was prohibitive. They criticised the forecast and said that it was a perfect day for burning; but on the same day a place much nearer the coast had a fire which got away from a large body of men who were fighting it. You have no way of telling unless you have trained personnel on the job.

I appreciate that; I was thinking of the Forestry Department forecasts?---We speak to the Divisional Officer at Dwellingup by telephone, and he gives us that information.

With regard to those forecasts that are sought during the fire season for a particular locality, do you keep a record of those forecasts made and of your answers?---No; I am afraid I would not have time to write them. On a hot day we have had calls on our telephone from various forecasts, up to more than one a minute.

So you could not tell us whether requests for forecasts had been made in the case of a particular fire, except as a matter of memory?---No, except as a matter of memory. I know that a spoke to somebody at Harvey - the Road Board secretary at Harvey. That is the only one I can remember. There were others because I heard them spoken of. Of course, on the night - I think it was the night of the 24th January - I personally returned to the office about 10 p.m. and dealt with a number of requests then; but they mainly came from Mr. Wallace of

the Forestry Department. But beyond that I can only speak as a matter of memory. There were a large number of requests.

Do you keep somebody on duty the whole of the time, during the summer season, to give forecast?---Not the whole of the season. There is a broken period from 9.30 p.m. to midnight. But that can always be covered; I can always retain somebody on duty if it was thought necessary by anybody.

The interest of this Commission is largely confined to fires that are liable to occur, and did occur, in the months of January, February and March. Would it be impracticable for you to indicate those parts of the State where the weather conditions are such that there is no particular risk of fire during those months?---I would say that there is no part of Western Australia that is not liable to fire in those months.

You do not get a real tropical downpour in the summer time in any part, that keeps it green?---I was thinking of the southern half of the State. We do not go into the pastoral areas. In the Kimberley division, and further south into the DeGrey and Gascoyne divisions, you do get summer rains and, of course, they are less. Their fire season is really the winter season, when they get little rain. But in the southern part of the State from, say, Meekatharra southwards, while on occasion you do get heavy rain - we have had as much as 6 inches in Perth in February - generally speaking, the whole of the southern part of the State is liable to fire in those months.

And that extends right out to the South Australian border?---Yes.

THE COMMISSIONER: I do not think there is anything else we wish to ask you at the present time. I am sure you will be prepared to answer anything that may crop up as a result of future evidence. I would like to

thank you for the trouble to which you have gone in preparing this record. It will be very useful and will be a matter of constant reference.

THE WITNESS: Thank you. Do you want me to provide you with a copy of the forecast of the 26th February?

THE COMMISSIONER: I should like one to complete the records.

THE WITNESS: Very well.

(The witness retired.)

BY THE COMMISSIONER: I understand you have prepared a statement following investigations by you in connection with a fire at Dwellingup insofar as the western escarpment of the Daring Range is concerned?---Yes. This was largely in response to a question asked by you at my previous appearance.

Would you read that evidence, please?---Yes. It might be as well if you have this map in front of you in order that you might follow what I shall say.

Yes; and you might indicate the points that you are speaking of?---Very well. (Map submitted; and Exhibit "F" returned to the Commission after loan to the Forests Department). My statement is as follows:-

Fire Position and Burning Activity along the
Darling Scarp from Karnet Road to the
Murray River and Southwards

Fire control activity along the Darling Scarp from the 20th to the 25th January, 1961, can best be appreciated if considered in five sectors, namely,

1. North Dandalup to the South Dandalup River.
2. South Dandalup to Location 1173.
3. 36 Mile Road to North Dandalup.
4. Location 1173 to Murray River.
5. South of the Murray River.

It cannot be claimed that this information is complete. It is compiled from information obtained by interviewing Fire Control Officers along the Bunbury Road and Forest officers who had some dealings with the fire on this western flank. The only points at which the forest lightning fires penetrated down the Scarp were the north and south ends of Sector 1 and Sector 3, though Bell's Location 496.

1. North Dandalup to the South Dandalup River:

On Friday, 20th January, at 2000 hours, Don Thorne, captain of the North Dandalup Bush Fire Brigade, was concerned at the heavy smoke coming over from the east. At 2130 hours he rang Oliver at Location 460 for information.

At 2230 hours, Sharpe rang from Oliver's phone to report that the forest fire was within half a mile of his orchard in Location 473.

BY THE COMMISSIONER: Whose orchard?---Sharpe's orchard. He had no telephone at his own place, so he came to Oliver's place to telephone. My statement continues --

Between 2230 hours and 2300 hours, the fire spotted ahead to forest adjoining Marshall's location 104. At about midnight, the fire spotted from near Marshall's to a hilltop in Reserve 14326.

Saturday, 21st January: Thorne attended the fire at Marshall's until 1300 hours. At 0300 hours, Broderick rang to report that fire was at location 1367, just east of the old Whittaker's mill site. At 0400 hours, Thorne was at Broderick's assisting with fire breaks around the sheds and buildings which were saved.

By 0800 hours, fire was down both sides of the river and in or close to Pollard's location 512.

Thorne's brigade formed a break along the foothills, then commenced burning for one mile in an easterly direction along Sharpe's Road, i.e. through location 76 and north of 512, and then south along the foothills to prevent the spread of the fire westwards. Between 1000 and 1100 hours, the east wind dropped.

After mid-day, with a west to south-west wind, they continued to work south along the foothills, in co-operation with a team under Colin Patterson who carried the burn as far south as Fairbridge Farm at Kinjurinup Brook. This burn was completed about 1800 hours. They then carried the burn further east on the south side of Sharpe's Road, past location 491. North of the road and east of 491 the country was too thin to burn from earlier controlled burning.

On Saturday 21st, at 0300 hours, Sergeant Whitfield of Pinjarra Police Station rang Fairbridge Farm for men and equipment to attend the fire near "Whittaker's Mill" east of North Dandalup. As farm manager, Mr Reid, was preparing equipment he saw fire coming over the hills from the north-east through McLarty's location 970. At 0400 hours, it reached the South Dandalup River, when the wind reversed to a south-westerly and fire spread along the river without crossing it. The fire being held along

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the river was the advancing fire and not the backburn.

The Adelaide road brigade, under Fire Control Officer J. Tucker, burnt back along the north bank of the Dandalup river through locations 80, 970, 53, 1371 and 1388 that morning.

Between 0800 and 0900 hours, before burning, J. Tucker rang the Pinjarra Road Board and informed the Secretary that the fire was on the north side of the brook. He also rang the Forests Department at Dwellingup and advised them of the position. He asked the road board secretary to send a spotter plane to check on the position and depth of the fire in the hills.

In the afternoon Mr. Reid, the farm manager, burnt north, from the South Dandalup Brook to the Kinjurinup Brook, to meet up with the brigades which had been burning southward from North Dandalup.

This sector of nearly 8 miles from north to south was then in a fairly safe condition, but the south end had not been tied back to the main fire face, or to safe country.

BY THE COMMISSIONER: At that stage, when it reached the burnt country, when had that country been burnt previously?---Before the previous 18 months, but I cannot say about the previous nine months.

You referred to the backburn being tied to a piece of Spring-burnt country in the north. That was in a much better condition?---Yes. Continuing with my statement --

2. South Dandalup River to Location 1173.

Between 2600 hours and midnight on Saturday, 21st January, F.C.O. J. Tucker with a team of men burnt southwards along the foothills from the South Dandalup Brook though Locations A16, A15, A8, A7 and through Location 1 , as far south as the road on the north boundary of Location 1173. This action was taken because of the large smoke visible to the east from the Marrinup fire (No.14). Apparently, Mr. Tucker was not aware that on top of the scarp there was a fairly wide belt of recently burnt country which would check the fire, that Dwellingup had men and equipment tackling the Marrinup fire, and that this burning south of the South Dandalup Brook was unnecessary.

This led to further burning by Rosenthal of Meelon, who lit east and north-east from the north boundary of Location 1172 and 910 along Woolhead's Road. (There was said to be some disagreement over this lighting between Rosenthal, who has sawmill interests at Meelon Siding, and N.H. Napier, who has property interests in this locality).

Fire Control Officer Salter rang A.D.F.O Campbell at Dwellingup and informed him not to light because it would outflank work being done around the Marrinup fire, but it was too late, as lighting had already been done by Rosenthal.

On the morning of Sunday 22nd, Les Rosenthal saw Snr. Forester McCoy, who emphasised they should not do any further lighting as it could embarrass the men already tackling the Marrinup fire (No. 14). Rosenthal and Salter decided not to burn any more at that stage, but would burn a break if necessary.

The fire was fairly quiet early in the morning, but during the morning, fire from F.C.O. Tucker's lighting on the previous day drove easterly up the gully from Locations 713 and 446, the latter location being held by absentee owner Woolhead. F.C.O. Salter and his men were fully engaged saving sheds at Woolhead's and preventing the fire crossing the road to the south and east.

Perhaps I should explain at this stage that most of the country to the east is fairly light litter, which would normally check the spread of fire, but which, under the extremely severe conditions, would carry fire, particularly if it were a driving wind. Continuing --

At 1100 hours, Overseer Matthews was instructed by radio to leave the Marrinup fire and proceed with Forest Guard Dawson to investigate the fire at Woolhead's Location 446. He found four Pinjarra brigade men under F.C.O. Patterson backburning along the road (presumably south of Location 446). He asked them to desist as the fire was running into State forest and could become a threat to men working on the Marrinup fire. He contacted Dwellingup by radio and was instructed to suppress this fire.

Forester McCoy arrived, and with the assistance of the local farmers the back fire was held. It was patrolled until 2300 hours when relief men arrived enabling Matthews and Forest Ranger Dawson to return to the Marrinup fire.

On Monday, 23rd, Overseer Matthews and three men -- I think they were local farmers -- boxed in this fire by burning south-west of the road from Location 446 to Location 691 and back to the railway dam on Okeley Brook.

This burning from South Dandalup to location 1173, on Saturday the 21st was an unfortunate occurrence, when every available man at Dwellingup was fully engaged following the outbreak of an unknown number of additional fires on the Friday night, and when the position of many of the fires faces was not known. The action of the fire control officer is understandable, particularly as his burning covered a 5-mile section with no road up to the start, and he could obtain no information on the fire position in State forest to the east of the sector.

36 mile-road to North Dandalup:

Throughout Saturday, the 21st January, the position of the North-western face of the fire through Myara and Clinton blocks was not known, but the fire was moving steadily northwards through country much of which had been burnt in recent years.

On Sunday, the 22nd, at 0900 hours, A.D.F.O. Campbell and assistant Forester Styles left Dwellingup to reconnoitre the section through Myara, Karnet and Clinton blocks. The fires was burning back quietly against a north-west wind, and there were some isolated patches of steady rain for short periods.

At 1400 hours, A.D.F.O Campbell telephoned F.C.O. Ladhams of Serpentine and arranged to pick him up with six men at 1700 hours. At 1700 hours Assistant Forester Styles met Ladhams, Buckley and five other men. The fire was still well back in the hills.

At 1730 hours, they met Scrivener who had just scouted the fire and gave an accurate description of its location and behaviour.

Preparations were made for back burning along tracks in country in Karnet block with light litter as there were too few men to hold the fire in heavy litter.

At this point it might be as well for me to interpolate and say that the controlled burning carried out in the blocks of Myara, Karnet and Clinton in past years was done in units of 1000 to 3000 acres, so that the age of the litter when last burnt varies. So they selected a line where the litter was fairly light to link the fire up with the Serpentine Dam.

The fire at that time being south-east of the line you drew to the Serpentine Dam?--Yes. To continue with my statement --

At 1930 a settler arrived with news that Skinner's location 600 was threatened by a south-west wind fanning the flank of the fire in Myara compartments 4 and 5. All men were taken immediately to Skinner's and backburning preparations commenced. The fire was still about one mile east and burning fiercely.

At 2030 hours Styles reported the position by phone to Dwellingup, and at the Keysbrook Post Office was informed that fire had crossed the road into Bell's property -- location 496.

At 2100 hours, Styles met Ladhams and both returned to Keysbrook where the latter was left to organise local bush fire personnel. Styles returned to Skinner's where the fire was being held with about 20 men then present, and two tractors with pumper units. By midnight the fire had halted about 1¼ miles east of Skinner's in Myara compartment six, and stopped at the backburn close to Skinner's south-east corner.

Northwards from Myara 6 to the Karnet road, over a distance of more than two miles, the fire had gone out without suppression on a 12-months old burn. Meanwhile, further south, Thorne's North Dandalup brigade burnt back along the north-east side of the road north of Oliver's location 460, but it is not known how far north this burning was carried or whether it was tied in to any previous burns or safe country. At 2200 hours the fire was approaching Preece's location 318 from the east and Thorne's men made contact with Keysbrook men.

I have not been able to get the complete story here because Mr. Thorne gave me the information up to a point. The Keysbrook men's activities were covered by information obtained from Mr. Fletcher, fire control officer, but I did not have access to that information. There is somewhat of a blank between the work done by the North Dandalup men and the operations of the Keysbrook men.

Monday the 23rd: After midnight, i.e. in the morning on Monday the 23rd information is lacking. It appears that burning was carried out in location 68 and north into location 1134 presumably as a measure against the fire reported to have penetrated through Bell's location 496, and threatening properties to the west.

At 0600 hours the fire was well in to location 668, presumably an escape from some of the back firing in this locality. During the morning, backburning along the foothills from north of Dandalup to the 38-mile road was carried out parallel to the Bunbury road through locations 141, 355, 378, 294, and 422, 405, 725, 552, 424, 549, 1043, 454, and 726. This was deemed necessary when the back fire through location 1134 broke away with a south-east wind about 0500 hours.

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At 1100 hours, a fresh gang under assistant forester Cooper proceeded to Karnet Block to contain the fire in that block by burning a break from the Karnet Road to the Serpentine River. Between 1400 and 1430 hours, 50 volunteers arrived, mostly without any hand tools. Backburning proceeded northwards about one mile from BY 61/1, until a breakaway occurred in late afternoon in a dirty swamp, with east wind, spotting into old litter. Volunteers then left the fire and retired to Keysbrook being unaware that a short distance to the west the fire would run on to a wide belt of 16 months old burn.

Fire control officers in Keysbrook proposed to burn back along the foothills from the 38 Mile to 34 Mile and up the 34 Mile Road in an easterly direction. Both Styles and fire control officer Ladhams opposed this proposal. In view of the possible danger from this backburn, Styles and Ladhams evacuated their men to the Bunbury Road. Here at 2130 hours, Styles saw fire control officer group at Keysbrook and instructed them not to light up because both he and Ladhams considered the fire could be easily held on the 12 months old burn in the hills, between 36 and 34 Mile Roads and east of Location 817.

Did you say a moment ago that was an 18 months old burn?--I cannot give the exact date. There is a patch work of burns in this locality with varying dates from mile to mile. My statement continues --

Unfortunately, burning had already commenced between the 38 and 36 Mile and it was the burning in this locality which was responsible the next day for the fire sweeping in with a north-westerly through the properties of Fawcett and Skinner.

BY THE COMMISSIONER: Will you please proceed?--Yes. To continue --

There was a strong difference of opinion with the fire control officers who were not prepared to consider the small properties in the hills and insisted on their proposed action. Styles asked them to defer action until he had arranged removal of the T.D.6 bulldozer. This was done at midnight and sent to Dwellingup.

At midnight Styles met F. Scrivener who said the fire was on an 18-months old burn about half a mile west of the point of the evening breakaway, and he considered the fire could be held on this burn.

Tuesday, 24th. At 0100 hours, Constable White arrived from Dwellingup, followed shortly by further men from Dwellingup who were sent to patrol and assist small farmers. Asst. Forester Styles and Constable White left to determine the position of small hills farmers and found the fire had gone out on the 18-months old burn, despite a strong easterly. They returned to Keysbrook at 0300 hours where the fire control officers still insisted on burning back north of the "36 mile". They instructed fire control officers that under no circumstances were they to light up north of the "36 mile road" or west of the surveyed road on the western boundary of Reserve 817.

No lighting was therefore done north of the 36 mile road. However, towards midday, fire previously lit between the 36 and 38-mile fanned by a strong north-west wind, spread up the valley several miles and burnt out the properties of Fawcett and Skinner, although the houses were saved by the efforts of Army and bush fire brigade personnel. Properties north of the "36 mile road" would have suffered the same fate if burning had been carried out along the foothills between the "36 mile" and "34 mile" roads.

Returning to the south again:-

4. Location 1173 to the Murray River.

Following the disastrous southward drive of the main fire on the night of Tuesday, 24th, men under F.C.O. Salter burnt along the northern boundary of Morgan's pasture, after 0700 hours on Wednesday, the 25th, that is, through Locations 130, 415 and 90, between the railway line and the road.

Here I quote D.F.O. Beggs --

This is taken from the written report of Mr. Beggs. To continue --

At approximately 0900 hours, on 25th, I accompanied Sgt. H. Whitfield, of Pinjarra Police, to Morgan's property and contacted F.C.O.s Salter and Tucker who had just completed burning on the northern boundary of the property. I advised them that the fire was burning slowly in their country in Teesdale block, and could be easily controlled along the Helio Road.

I pointed out that we could easily control this fire if we had a gang of fit men but all men who were at Dwellingup were suffering from sore eyes and the doctors had ordered them to Pinjarra for further treatment and a rest from the smoke before serious injury resulted. F.C.O.s Salter and Tucker

would not consider this suggestion and stated that they had prepared a break on the flats and had 100 men ready to go. I asked that at least they hold their fire until Dwellingup was evacuated and that they get in touch with the Harvey Forests Dept. before lighting up.

The reason for this was that if they lit there they would cut the Pinjarra-Dwellingup Road and impede evacuation.

At 1100 hours, F.C.O. Tucker came to Dwellingup and asked for the town to be evacuated immediately because they wanted to start their backburn and their fire would probably cut the road. I told him it was impossible to complete the evacuation before late afternoon and if they were to burn, the least they could do would be to take the burn down the Pinjarra Road from Morgan's and burn an edge there first. This was done but in the process a culvert was set on fire which could have blocked the road if it had not been extinguished by our Northcliffe gang.

That concludes Mr. Beggs's report. Continuing:-

Then F.C.O.s Salter, Tucker, and their men, proceeded with their burning from the prepared fire lanes from the Dwellingup Road, south through Locations 717, 718, 1136, 1177, 913, 156, 315, and 1137, to the Murray River.

Four brigades did the burning. Rain on the Wednesday evening impeded some of the burning and this 6 mile face of fire did not link up with the main forest fire which, as D.F.O. Beggs intimated, practically petered out at Helio Road, some 2 to 3 miles further east.

It is understood that the decision of the F.C.O.s to carry out this burn was largely influenced by a Weather Bureau forecast of strong easterly winds which, in fact, did not occur.

5. <u>South of the Murray River</u>.

The position is covered by a report from Regional Inspector Moore, from whom I quote as under --

> Anticipating trouble, the farmers after consultation with D.F.O. B. Campbell of Harvey on the afternoon of Tuesday, the 24th January, had prepared a firebreak south of the Murray River from which it was proposed to backfire if the fire from Dwellingup crossed the Murray (see map).

"By arrangement with Campbell no backfiring was to be undertaken until he gave his approval. This approval was given to the Chairman of the Drakesbrook Road Board (Mr. N. McNeil) about midnight on the 24th, after Campbell had discovered spot fires burning either side of the Nanga Brook-Waroona Road.

"Actually no backfiring was undertaken, as shortly afterwards the wind dropped and between 2 and 3 a.m. on the 25th, it changed to a gentle south-west breeze.

"The farmers did not in all cases wait for the fire to reach this firebreak but actually attempted to save more farm land by putting the fire out at the face of the fire with back sprays.

"South of the river, areas burnt are as shown on the map".

In retrospect, it appears that the only burning from the foothills that could be fully justified was that in sector 1 to contain the two points where fire penetrated on the night of the 20-21st January. North of sector 1 the fire face could easily have been held on the frequently burnt forest country parallel to the Scarp, where, in fact, a lot of the fire did peter out. If there had been available on Sunday the 22nd, an officer with a detailed knowledge of the area, and sufficient men, the break-through at Bell's should never have occurred, and no backburning from North Dandalup to Keysbrook would have been necessary.

In further explanation, by this time all the men and the farming community were devoted to sector 1. All Forests personnel based at Dwellingup were fully employed on the numerous outbreaks which had occurred on the nights of Thursday and Friday, and there were no personnel available to attend to the north-west sector of the fire between Sharpe's Location 473 and the Serpentine Dam. To continue my statement -

In any case, the burning should never have been done north of the 38 Mile Road.

To the south, burning back in sector 2 was unnecessary, but was an action which the F.C.O. could justify because of -

(a) The big smoke to the east of him in Marinup Block; and

(b) His lack of knowledge of the condition of the forest and its tracks and roads on the Scarp.

General Comments:

It appears that fire penetrated the farming areas of the Scarp at three points only, namely -

1 and 2: At North Dandalup and Fairbridge respectively in the early hours of Saturday the 21st January. These were contained by the counter-firing in sector 1, from Sharpe's Road at North Dandalup to the South Dandalup River, on Saturday the

21st (approximately 8 miles).

3: Through Bell's property (Location 496) and towards Balgobin Brook, on the late afternoon and evening of Sunday the 22nd. This was contained by backburning a strip along the foothills from North Dandalup to the 38 Mile Road at Keysbrook (approximately 5½ miles).

Over much of the country above the scarp the fire was checked by a wide belt which has been subject to frequent and regular burning over many years.

In some sections the fire halted, and in others it could have been fairly easily handled if resources had been readily available.

In retrospect, it can now be seen that the northern and southern ends of the 8 miles in sector 1 could have been linked back to spring burns and fire faces in the hills, if personnel with a knowledge of the area had been readily available on Saturday the 21st. As it was, decisions had to be made by F.C.O's. west of the scarp without knowledge of the fire position or condition of the fuel bed back in the forest, and resulted in counter-firing over some 25 miles from the 36 Mile Road to the Murray River.

The whole experience indicates the need for much closer liaison between the Forests officer and various brigades covering the properties for the full length of the Darling Scarp from Mundaring in the north to Dardanup in the south. One difficulty in the past has been the lack of bush fire brigades covering the properties in the 'hills' areas, many of which are held by absentee owners, and are wholly or partially undeveloped. There have been many cases of satisfactory co-operation with some individual farmers, but no organised bodies with whom firm arrangements could be made for joint action to burn adjacent forest and private land along a common boundary.

Persons interviewed for information on the Fire Control Activity along the Darling Scarp

| | | |
|---|---|---|
| Mr. Don Thorne | Captain | North Dandalup Bush Fire Brigade. |
| Mr. J. Tucker | Fire Control Officer | Adelaide Road Brigade. |
| Mr. Reid | Manager | Fairbridge Farm School. |
| Mr. R. Salter | F.C.O. | Meelon. |
| Mr. Pollard | Farmer | North Dandalup. |
| Mr. J. Skinner | Farmer | S.E. of North Dandalup. |
| Mr. Fawcett | Farmer | S.E. of North Dandalup. |

Forest Guard A. Dawson.

Senior Forester J. McCoy.

Assistant Forester G. Styles.

Written Reports Consulted

| | |
|---|---|
| B.J. Beggs | Divisional Forest Officer |
| D.R. Moore | Regional Inspector |

BY THE COMMISSIONER: On page 4, underneath the fourth paragraph, you mention that you received a certain amount of help from Mr. Thorne?---Yes.

You said there was a gap there in your knowledge because access was not available to certain information. What did that mean more directly?---The next man in the chain would be Mr. Fletcher and I did not see him at any time nor have I seen any written reports from him. However he was interviewed by some officers of the Forests Department.

Why could you not get that information?---I just could not find anything written. I think Mr. McArthur may be able to comment on it.

Why did you not see Mr. Fletcher -- because he had already been interviewed by some officer?---Because he had been interviewed. At the time I made these inquiries I realised he had been interviewed by an officer of the department, and therefore I did not endeavour to see him.

There seems to have been a certain amount of difficulty arising from the fact that a fire control officer at the foot of the escarpment, or the country to the west of the escarpment, could not make the necessary contact to obtain definite information as to where the fire was; and in other cases because they were not acquainted with the country near the top of the scarp where the department carried out certain controlled burning. Can you tell us whether any effort is being made to overcome those disadvantages in the future? Have any steps been taken up to date?---There have been some meetings in the Pinjarra, Keysbrook and Serpentine area, attended by road board personnel, bush fire brigades, and the forest officers from the Dwellingup locality, in which they have fully acquainted each other with each other's problems. The Forest officers appointed there had great difficulty in getting any organised body to deal with any of those small properties down here on the escarpment back of the hills. The Pinjarra Road Board, recognising that, appointed a bush fire control officer at one of those hills properties, and the department has undertaken to keep the brigade personnel there supplied with maps and lithos showing the roads and tracks that are open in those localities, and the areas that have been burned in recent years, so that they are fully informed of the state of the forest and farmlands adjoining.

To whom are you going to supply the information?---The fire officer appointed at the time; they will all be supplied.

Are they going to supply this information to both fire control officers and brigades?---To the fire control officers for transmission to the brigades.

Do you think that is a good idea; do you think it is better to go direct to the bush fire brigade officers and make sure they know the position?---It has been the practice for many many years to visit personnel on the boundaries; but if there is anyone in authority, e.g. the bush fire brigade officer or fire control officer, they will certainly contact these personnel.

I realise that in many road boards they are one and the same person; but I have been told that in some road boards there is a tendency to retain men as fire control officers after they have reached the stage of active movement. In that case, the bush fire brigade man would be the person who would benefit most from having knowledge of the country?---Yes.

Your department has no definite ideas in that direction, with regard to approaching one or the other, that you could tell me?---I do not think so; not that I am aware of. We will make contact initially at meetings. We meet a group of men; but individually the office bearers are those who are in a position to take an active interest in it.

After all, the department will want to satisfy itself over the right man for the information?---Yes.

Who can tell me more about the meetings that have taken place?---Mr. B.J. Beggs, Divisional Officer at Manjimup, who was formerly at Dwellingup; Mr. Frank Campbell, Divisional Officer at Dwellingup. Both attended the meetings. Also, Mr. Milesi, Fire Control Superintendent, Forests Department.

Can you tell me what action was taken by the fire control officers -- whether Forestry officers or anybody else -- from the Dwellingup location to make contact and keep contact with the people on the west of the escarpment?---There were two main occasions: The first concerned the north-western face of the fire, from

reconnaissance they made of the fire, with Fire Control Officer Ladhams of Serpentine; and the liaison there was quite good.

Throughout?---Throughout, yes.

In what form was the contact?---A telephone contact, initially; and then a Forest officer was despatched there with some Forest personnel, and they work in with Mr. Ladhams and his men; and it was a very satisfactory arrangement -- the relationship was good.

Who was the Forest officer?---Assistant Forest Officer Styles. Following that reconnaissance, on the return trip Divisional Officer Campbell called on Mr. Salter at Meelon. He had been in touch with him by telephone previously. They had had a disagreement on the telephone, but when they made contact that was quickly ironed out; and they were in contact intermittently thereafter.

By telephone?---By telephone, and by contact with Forestry officers McCoy and Dawson, on the Sunday and Monday. Those are the only two contacts that I know of; but Mr. Campbell or Mr. Beggs can give you further information on that.

Would you say they are the only two locations in which it was necessary to make contact, as it turned out?---Well, contact - - -

To explain that a little more: I understand from your evidence that in some places backburns were lit because the local people did not have sufficient information; and they did not have sufficient information, perhaps, because the Forestry officers responsible were very busy and considered there was no danger in that direction?--- Initially they were unaware of any fire in that direction. This was on the Saturday.

In what direction?---On the western face, until they received messages from the men on the western face. I understand that although no Forest officers in Dwellingup made contact with fire control officers, the reverse

procedure took place. Mr. Don Thorne tried to ring Dwellingup on the Friday night. He could not get through at the time, and he left a message for his wife to ring. The second occasion was when Mr. Tucker rang on the Saturday morning for information concerning the general position on the scarp, and he was unable to get very much because there had been so many strikes overnight that no-one knew the position of the fires on the scarp. They could not tell Mr. Tucker whether there was any fire close to his boundary or not.

Can you tell me who it was that Mr. Thorne contacted at the Forestry office?---No.

The main weakness throughout the whole business -- apart from the fact that lightning was going to strike, and fires were going to start, and you may not have had an adequate number of men available -- appears to have been in the communications; would you say that is correct?---That is very true. It is an unfortunate fact that although our radio communication generally is about 99 per cent. Effective, under these severe weather conditions, with electrical storms about, static interference was so bad, field gangs could not get messages back to the Dwellingup headquarters. So that although the men in the field picked up some of those fires overnight,

they were not able to report the position to Dwellingup headquarters, and Dwellingup was apparently quite unaware until much late of the occurrence of fires, 10a; 12; 15; and 14 to the west. No. 10a was first picked up by an officer on patrol about 7 o'clock on Friday evening, from fire 10, and he had a gang working on that until he informed Dwellingup or got back some hours later. No. 12 had penetrated to Fairbridge Farm early in the morning and Dwellingup had no information of it whatever. Later in the morning, when Tucker rang, they had no idea a fire was there. Fire No. 14 was first picked up from the Teesdale Tower about 9 a.m. on Saturday, but its position was not located in the field until an hour or two later.

As the Forests Department, for whatever reason, did not know what was happening to the fire on the western boundary in so many places, there seems to have been ample justification for people on the west to be seriously concerned. Even if they could not find a fire near their boundary, they would hardly wait until a fire hit them before they took some action?---Agreed; and there is no suggestion that they did not take the right action.

From the evidence you have given, it does seem to me that there were three sorts of backburn: one that was justified by the good results it gave, and another class which was justified as a tactical move in the light of the information available, and some which were lit against advice of the Forests Department, to the effect that they were not required? Is that a correct statement?---I think it is.

Which were the ones you would say justified being lit by the results obtained?---I would say Sectors 1 and 3 up to the 36 mile. They achieved the purpose of encompassing the three breakthroughs of the fire to the scarp.

Which ones would you say were justified, tactically, in the light of the information available to those who lit them?---I would say the lighting of fires by fire control officer Tucker in sector 2. He had no information of the condition of the forests up here. In common with, I should say, almost every fire control officer there, they did not know the forest there -- the location of the roads and tracks. He could see much smoke and he would know that sooner or later he would have an east wind coming in. He lit back there and contained that sector. That is one section which was unnecessary in the light of subsequent events, but he was not in a position to know that.

Have you any others in that category?---The fire control officers concerned would no doubt justify sector 4 on the same grounds; although not quite the same grounds.

I thought you told me that they were advised that the fire could be easily held on the Helio road?---Yes. On the other hand, they were very concerned, according to their statements, at the weather forecast of a strong easterly wind that night. In their opinion, this could not be held there and they had already prepared a line here, and they felt they were justified in burning it.

They were burning private property?---Yes, a bit. Quite a lot of fencing was damaged, and quite a number of farmers were concerned. It was in this country, and if they had liked to take a group of men up there they could easily have put out that bit of fire because a lot had gone out along the road, and a few salients had gone across and were burning in light litter. That was the position as I understood it from Mr. Beggs. I was not there.

Was all that uncoloured portion in sector 4, control burnt?---Again, I can only say I believe it was all control burnt. I have seen some since, and it was all right.

Where, if anywhere, in your opinion, was the lighting of a back fire not justified in any circumstances?---Between the 36 and 38-mile. That was done apparently of a breakthrough in a swamp some 3 miles east. The

local officers knows that was going to run on to country of light litter and could easily be controlled. To burn back here for another four miles of country was rather a panic measure. That was not burnt at all, and it just went out.

Were they in a position to know that was likely to happen?---They were told that by a forest officer but did not accept it. They would have burnt another two miles but for police constable White.

Did they have time to look at the area and see it was in the condition described?---They did.

Did they do that?---Not that I am aware of. I make an exception of fire control officer Ladhams. He was strongly averse to burning to the north. But the others did.

Again they were in private property?---Yes.

Did not the owners of those properties raise strong objection; or were they absentee owners?---I am not in a position to know what owners were present. There is a statement that police constable White went up this road to look into the position with these small farmers and came back, and sergeant White issued the instruction that they were not to burn north of the 36-mile, or to the west of the road along reserve 817.

What about the southern end where you say they were advised not to burn? Do you know if the owners of the land that was burnt were present at the discussions?---No, I do not know.

What is the normal strength of your staff at Dwellingup?---About 45 employees all told. Normally there are four fire gangs with an overseer and five men in each. That takes care of 24. They could get two more emergency gangs from sawmill employees and men on logging projects. In normal conditions the group of men in the maintenance workshop were never sent to a fire as fire-fighters because they are normally fully occupied on the maintenance of vehicles in those circumstances. Beyond that, all arrangements are emergency ones.

D.W.R STEWART,

There is the employment of sawmill employees in the division -- Banksiadale, Nanga Brook, and Chadoora Mill; and to employ them effectively means a very big drain on control staff which are not available in the division. Therefore under conditions like this men are drained off from other divisions in the South-west. I have previously mentioned in my evidence that the adjoining divisions had their own fire problems because Harvey had five lightning fires; Collie and Mundaring two or three; and Gleneagle, one. So they could not give, perhaps, as much support as they otherwise would have given. Men were being drawn off from as far south as Pemberton, Manjimup, Margaret River and Ludlow. But that was only after the second day of the fire.

I understand from evidence given by representatives of the bush fire organisation that there have been, before now, no fire brigades established along that western escarpment. Am I correct in my assumption?---

D.W.R STEWART,
24/5/61.

--- ? ---As far as I can gather from reading the evidence, yes; I cannot tell you from my own knowledge.

Do you know of any arrangements made by the Forests Department to contact bush fire brigade members prior to the fire?---I cannot answer that one, but the local officers may be able to.

Do you know if any fires escape from back-burning operations?---Not positively, but apparently there was some escape from the Keysbrook area on the Sunday night in that locality, because Mr. Thorne just said that there was fire in that location, but without saying from where it came -- and it appears that it came from some of the burning being done there -- as far as our information goes the head fire was away from that location. The other main escape was the one between the 36 and 38 Mile which was lit in the early morning of Tuesday, the 24th, and with high north-west winds, from about 11. 30 a.m. to mid-day. That swept in for a distance of some three miles. I do not know whether you can say that it escaped. It did not escape over the line from which it was lit.

We have had evidence of fire going over the main road. Do you know anything about that?---Not personally; only from the written reports. During the back burn, between the 36 and 38 Mile there was one escape in Location 250 which was dealt with very promptly by the men concerned and the Army personnel that were present.

You say that this report is not complete, but you seem to have gone very close to it. When you say it is not complete you refer to a couple of hours where information was missing in regard to a particular sector?---I was unable to fill in a gap in that Keysbrook sector. Mr. Thorne did not know the complete story. For example, he told me that Mr. Kentish was in charge of men there, but he took sick and went home and there was some confusion about the leadership there. That was the statement by Mr. Thorne and the gap could no doubt be filled by Mr. Kentish or Mr. Fletcher

You say that Mr. Tucker rang the Pinjarra Road Board and asked that a spotter 'plane be sent to check on the position and depth of the fire in the hills?---At that time it might have been very helpful if the board had been able to arrange that, but because there was a heavy canopy of smoke they may not have been able to do anything effective; but I do not know.

One of the difficulties that you refer to is that you say that had there been available on Sunday, the 22nd, an officer with a detailed knowledge of the area with sufficient men the fire should never have occurred and no back-burn from North Dandalup to Keysbrook would be necessary. Viewing the whole matter now, in the light of what you have seen in the fire, how many officers and men do you think you would have required there to handle that situation reasonably efficiently?---One officer and as few as 10 men would have been sufficient.

I mean that if you were the officer in charge of the Dwellingup division, what would you say then ?---At what stage, on the Saturday?

I do not care at what stage. I mean to handle it reasonably efficiently. Obviously, you cannot prevent lightning fires starting, but had you sufficient men there it would have been reasonable to expect to you have kept them under control. There must have been a lot of burning done unnecessarily because you did not have sufficient men to keep them under control. If you can visualise the position then just say so?---The stage would have to be when the position of the fires there was known and when it was known which were lit on the Saturday or even Sunday morning before one would have a fairly complete picture. At that stage, I think you could probably have used 30 or 40 officers and a few 100 (as per hard copy) men.

Experienced men?---Yes.

You could not possibly have had 30 or 40 officers with the fires raging in the other districts?---We did

have as many as 24 up there eventually and they were spread pretty thinly when some had to be rostered off for a little sleep some time.

That would be after Saturday night?---Yes.

So, in short, it would not be practicable to handle that fire before the Sunday, anyhow?---No.

You said to attend the fire?---Not with the crop of fires that occurred on the Friday night and which showed up at intervals during the Saturday morning.

BY MR. HALE: Do you think it might have been possible to use fully equipped and self-contained bush fire brigades at any stage? I mean brigades well away from this fire officer?---There would have been if there had been sufficient staff with a knowledge of the district to guide the men. Men from another area can quite easily get into strife if they do not know their way around. If you could allot one staff man to a unit I think they could have been used.

If one of your officers could have been made available to an independent bush fire brigade to guide them up their lines at any stage would that have been of any assistance?---As far as this question is concerned we ran out of officers and we had every division drained from a security angle and we still did not have nearly enough.

BY THE COMMISSIONER: Does your department's plans for recruitment in the future visualise any considerable increase in the officer strength of the department?---Not a considerable increase, but a gradual increase on a small scale.

You must overcome that difficulty somehow by getting men from the adjoining district and showing them the country before the fires occur?---During the course of their service the men do get transferred from one district to another, and we are always able to get a number who are reasonably well informed.

BY MR. OATES: I take it the position of the forestry area on the top of the scarp prior to the opening would change from year to year; that is the condition of the tracks and those recently burnt would continue to change?---The position with regard to roads and tracks would not change, or there would be very minor changes. There may be a few additional tracks put in from time to time. All the roads and tracks are kept open from year to year for access. The pattern of the country would change from year to year because the burning is done in rotation -- some country will be burnt at intervals of three years, some at four, depending on the type of vegetation. So, although there is a fairly wide belt capable of being burnt, most of the division is burnt on a longer rotation and the brigade would be kept informed from year to year on any burning done each season.

Do you think it would be possible or advantageous in order to avoid any confusion that might exist in the event of this sort of thing happening again if, some time prior to the opening of the bushing season -- the dangerous dry period of the year -- a conference could be arranged of the people concerned -- of the Forests Department, the actual officers of the brigades at the time and the control officers from the roads boards -- and some protective plan worked out before it started. You people could supply maps and other information. Could that be done?---It would certainly be an advantage and I certainly think it would be possible to get these groups together. I take it you are suggesting a period about November-December, when most of the spring burning has been done, and the prohibited period is about to commence.

BY THE COMMISSIONER: Have you enough knowledge to say whether the private bush country along the escarpment had been protectively burnt, and, if so, to what extent?---No. Again I would suggest that any of the officers from Dwellingup could give you the answer to that.

That is the Dwellingup fire we have been discussing. Now what about the rest of the escarpment? Can you say if your Department is arranging to make some provision for co-operation with people all along the escarpment?---It varies from locality to locality. In the Harvey division they have been pretty active since this occurrence. I think every officer from north to south is fully alive to the advantage of co-operation and of meetings as Mr. Oats suggested.

BY THE COMMISSIONER: Thank you, Mr. Stewart. You have done a pretty good job on this. I realise that these are not your own observations but a story you have put together from observations you have received. There is always a difficulty in explaining what is meant in such circumstances.

BY MR. PURSE: You say the Forestry was that busy they had no knowledge of what happened in the western scarp. Sworn evidence has been obtained from 75% of the control officers and other people?---That is so. We discussed it with the men concerned and got their story.

In your earlier evidence you said that you had no officers available and that you handed over control to Mr. Ladham who was chairman of Serpentine-Jarrahdale. I understand he controlled all that burn at the bottom of the north-west sector, and agreed with the burn on the 36-mile but not the 38?---I cannot say whether he did nor not. He was opposed to any burn, but they had already started on 36 to 38 before he was aware of it.

He was happy about the 36-mile burn?---I do not think he was happy about it. It had been started so they carried on to that road. There was no call for that burning to be done. As it was put to me by one of the

officers, they had a large number of volunteers - 50-odd men -- and when it broke away in the swamp they all panicked and went to Keysbrook and burnt along the road. No-one had any knowledge of the position except Ladham and Styles. The other men regarded one breakaway as threatening the whole country.

(The witness retired.)

SITTING suspended for lunch.

THOMAS WILLIAM PEARSON,
Farmer, Brunswick Junction,
Sworn and examined:

BY THE COMMISSIONER: You have prepared a copy of your evidence. Will you read it?---Yes, it is as follows:-

Being a resident of the district for the past 30 years, and having developed farming land in Brunswick, Roelands and Lake Preston districts, the members of the local branch feel I am competent to speak on their behalf. In the development of this land I have had a great deal of experience with burning off and have also played a big part in bush fire control and fire fighting.

Over the years there have been a number of fires which could have been much less damaging had certain precautionary measures been adopted.

The biggest hazard facing farmers today is forest country, both private and Government owned which has been allowed to develop to the stage where once a fire has started, no equipment available to the fire fighter is capable of stopping it.

Properly regulated burning off should be carried out with the object of making it impossible for a big fire, such as we have recently experienced, to ravage the countryside. Severe penalties should be imposed on private owners allowing this hazard to continue and the Government should face up to its responsibility in this direction.

Controlled burning is very necessary and essential to the development of the farming land of the South-West area; however, under the existing legislation, burning off is often permitted in districts or areas at a time when it is extremely dangerous, whilst at the same time other areas in an advantageous position to burn off are not permitted to do so.

Controlled burning off to date has been only partially satisfactory due to lack of co-operation amongst farmers. Often pressure is brought to bear on the Minister by a minority to prevent burning, which is extremely important and to the benefit of the greatest majority in particular districts.

A chief fire control officer with wide experience and full power to act in all emergencies and to control all burning-off operations is very necessary, and should be appointed by the Government.

Full use should be made of 2-way radio by this officer in conjunction with fire officers appointed in the areas as at present.

During a recent visit to the United Kingdom, I noted much publicity was given to the recent fires. Some of this publicity was greatly exaggerated and it is expected that future fires would receive similar headlines, so it is not hard to imagine the effect on the minds of potential migrants.

Are you a land owner?---Yes.

Where are your holdings?---Block 36, which is a repurchased estate at Brunswick Junction, from the old State farms which were the first farming area. This is a block of 400 acres of pretty highly developed land. I hold another 700 acres known as Clifton area, consisting mostly of highly developed land, south west of Brunswick. I also have a property at Lake Preston of 3,500 acres.

Are you a fire control officer?---Yes.

How long have you been one?---10 years.

Are you a member of a bush fire brigade?---Yes.

Just an ordinary member, a captain or in some such capacity?---Yes, just a member.

How long have you been a member of that bush fire brigade?---Quite a few years.

You say that the biggest hazard facing farmers today is forest country, both private and Government owned?---That is correct.

When you say Government owned, are you referring to land which is held by the Forest Department, and not occupied?---Mostly forestry country.

You also refer to unoccupied Crown lands?---Yes.

Are they in the same category?---No, they are two different things.

From the way they look after them?---That is right.

Is there much unoccupied Crown land in your district?---Not a great amount. So far as the Forestry Department is concerned we seem to be different from other places. Over the last two or three years we have had wonderful co-operation from them. I would like to say that.

Is the privately-owned land in the hands of the local people?---It is privately owned.

Not absentee owners?---Not necessarily. That is one of the hazards we have. It is a big one.

Speaking of the burning which you believe should be carried out with the object of making it impossible for a big fire to travel, you say severe penalties should be imposed on private owners allowing this hazard to continue and the Government should face up to its responsibility in this direction. Do you mean the Government should face up to the responsibility of imposing heavy penalties on private owners?---It should help the road boards. I realise that it is the road boards' responsibility. However, they have a big job to do and it is too much to expect them to do it all. If pressure were brought to bear by the Government it would assist.

In making private property people burn their country?---Yes.

Severe penalties can be imposed even now, up to ,100 fine; and if a person will not do it the local authority or the Government can do it and recover the cost?---We realise that but it does not get done.

Why do you think the local authorities do not do that?---That is rather hard to answer. I really do not

think sufficient interest is taken in fires. It seems to be that the precedent is not to burn. That is wrong. Instead of prosecutions for burning, there should be more for not burning. More publicity should be given by the Government for people to burn. This would encourage them to burn at every opportunity when it would be safe. If this were done I am certain there would not be these hazards.

I am thinking of your suggestion that the Government should step into this. So far as I understand, the principle behind the Bush Fires Act is based upon making the local people take the necessary action themselves and accept the responsibility. If the Government went so far as to start and direct people, the officers in the Government who had to make those decisions would probably be not nearly as well acquainted with local conditions as the local people themselves?---I agree. I think the more you can leave it to local authorities and give them the responsibility, the better. I feel the appointment of a chief fire control officer -- could I ask a question?

I will not guarantee to be able to answer it, but you can ask it?---Has the chief fire control officer the full power he needs?

I cannot answer that. I do not know what he needs. I am here to find out what he needs?---The chief fire control officer has to make some big decisions, and if one is appointed we would want to know if he has the authority to give instructions to carry out anything he thinks is right.

You have a chief fire control officer in your road board, I take it?---We have, but we do not think that is exactly right.

Is it the secretary of the road board?---Yes.

You would like -- ?---We would like a man who is very versatile with fires and versatile with the country.

It is in the hands of the local authority to appoint whom it likes as chief fire control officer?---We think that is very important; and also that this chief fire control officer be head of an advisory committee to be made up of two or three fire officers and definitely with representation of the Forests Department.

Have you not an advisory committee in your road board?---No.

Some road boards have?---I believe so.

I think the idea you have is for two different types of men. I think you probably need somebody like the secretary of the road board who is always in his office to answer routine inquiries and references that come in, and you require somebody to take charge of the fire control operations?---That is the line we want.

We get changes of secretaries. They come from another area and what might apply there would not apply to our area. You want one who is very versatile with the country. I do not think he should be asked to do it free. I think he should have an honorarium.

That introduces another element. As far as I can recall the Act does not provide for fire control officers appointed by local authorities to be paid. I do not know of any cases where they are, but I have no doubt that that could be overcome if it were to result in an improvement in local control?---We think it would, but we would want the best man. I do not wish to cast a slur on the secretary of the board but he realises himself that he does not know anything about firefighting.

THE COMMISSIONER: Mr. Hale, would you tell us the position in regard to the appointment of a fire control officer by a local authority and also the position with regard to remuneration?

MR. HALE: An officer appointed by the local authority may be paid but he is not generally paid. There are some districts which also have deputy chief fire officers although there is no such official position created by the Bush Fires Act for that.

THE COMMISSIONER: There is no chief fire control officer under the Act. It is only a custom which was grown up of appointing someone. Thankyou.

BY THE COMMISSIONER: The point is that the local authority can pay such a man if it desires to do so, but I do not know that that is your suggestion, is it?---Yes, I think that would be the right thing.

You say that control burning is very necessary and essential to the development of the farming land of the South-West area but that under the existing legislation burning off is often permitted in districts or areas at a time when it is extremely dangerous. That, of course, means you have appointed the wrong man as control officer in those districts?---That may not read as we feel. We feel that again it should be left to the local

authorities. Sometimes it is necessary to impose a ban on the whole State, but we feel it is a terrific State. Well, in some areas it would be quite a suitable time to burn. We again feel that it is too big a responsibility for a Minister to have to handle everything. He could be relieved a lot by the local authorities being given the responsibility. Burning is very necessary for the development of the country and we all seem to miss out on a lot of burning over little things here and there. That is why a lot of hazards have grown up again.

As far as I know the position, the prohibited period is fixed by declaration issued by the Governor, and the Minister has the opportunity of changing it to some extent under certain circumstances, and the local authorities also have the power to move the beginning of the prohibited period backwards or forwards and also to move the end of it either way?---That is so.

That does not meet your requirements?---No, not entirely. We feel some times that pressure is brought to bear from certain sources. Put it this was: It could be a suitable time to burn and these people will sit on the fence until such time as a burn can be carried out and they will squeal if they feel they are going to suffer. They might have a very little which will be affected but that is the way they act. We feel again that the Chief Fire Control Officer would have the say. He would be of great benefit to us by saying yes or no in regard to certain requests in relation to burning.

These States when burning is permitted are based on certain recommendations of the local authority. I do not say there is a pattern but I think local authorities' representations would receive every consideration. What do you mean when you say that pressure is brought to bear on the Minister by a minority to prevent burning? What are the circumstances where you can imagine a minority would influence a Minister against the wishes of a local authority?---I may have worded that a little incorrectly. It is not exactly the way we were thinking.

Is this what you are thinking: You believe that the whole business of prohibited and restricted periods could be left to the local authority entirely?---As much as possible; and there should not be so many State bans imposed.

Or imposed over more restrictive areas?---Yes, that is it. We had a wonderful controlled burn which is something we have been after. Again we have to thank the Forests Department down there for it. On the coastal strip we had a 30-mile controlled burn and we never had a mishap. That was a real fire hazard but it was carried out efficiently and well.

What month was that?---From the middle of February right through that hot time.

When did your burning season open this year?---It started with us in the middle of February.

The 15th?---Yes, which is a month earlier than usual.

Of course you can appreciate that if it were left entirely in the hands of the local people it would mean some considerable co-operation between adjoining road boards?---That is what we want. We want co-operation everywhere, which is what we lack, and we feel that is the way to bring it in. Give people the responsibility; there has to be co-operation everywhere. There will never be another fire like we had this time. It should never have been and it is doing the State a lot of harm. Co-operation is what we want.

When you refer to a chief fire control officer with a wide knowledge, are you thinking only of your own district?---Yes, the Harvey Road Board; but we feel it should apply elsewhere.

You think it should be a general provision: I appreciate that. I think you have put your case forward very well, particularly the three or four points you desired to make. I do not think there is anything further I can ask you which will help me.

(The Witness retired).

HENRY ARTHUR BAKER, 52 Victoria Street,
Guildford, retired farmer;
sworn and examined:

BY THE COMMISSIONER: Are you a landowner at present?---Not Exactly. My son is the owner of the land.

In what district were you a landowner previously?---Swan Valley, Safety Bay, and Gooseberry Hill, now.

You have prepared some evidence of which you have a copy. Would you please read it?---Yes. It is as follows:-

Bush fire Prevention: This would become very much better than control or trying to fight out-of-control bushfires under tiring and excessive temperatures often well over 100 degrees in the shade, and reaching 160 degrees in the sun, bad enough, without any fire heat approaching 1000 degrees.

H.A. BAKER,
24/5/61.

After the Mayanup fire disaster our Governor Sir Charles Gairdner made an appeal for something to be organised to prevent such extensive out of control bush fires, unfortunately little or nothing was attempted by any organised authority, nobody did anything in this regard. While no-one appears to want any responsible part or make decisions of what should or should not be done to implement such a policy, as his appeal suggested, and should be carried out while it is only when further disaster takes place that further talk of doing so will take place such as now.

Under appalling conditions it is almost useless to fight these fires, actually the most that we are able to do is stand helplessly around hoping and watching for the best to happen, in order to save anything at all. Often one is able to make a burn back or break to hold a fire in one direction only to see all efforts lost by a sudden change of a gale force wind. (I know this having been treated so). And talking of winds, most of our summer winds are now of gale force, mainly because of an extensive removal of our timbers. Over the last twenty (20) years this has become most noticeable where huge tracts of country have been cleared and opened up, also much timber cut for milling. These summer winds used to be soft warm breezes, other than a sea breeze, which nearly always checks fires at evening time. This does not happen now; the land winds often of a cyclonic nature take over all night long. In days gone by prodigious tasks were performed mainly because of the full co-operation that existed between the early farmers and settlers because they all knew very well what the consequences would be without such co-operation. Apart from horse drawn implements we had only hour hands with rakes, spades, axes etc., with wet bags or bushes to fight with, no fast moving modern machinery, cars, trucks, etc., only cycles and horses. No communication such as we have now; yet many such fires were stopped, put out, with thousands of pounds worth of property saved. We could be forgiven in this modern age for wondering why we have these fires at all.

Being an interested party of the Lesmurdie-Kalamunda-Gooseberry Hill area, and doing work for it at the present time, I should like to know what is being done right now to prevent the next bush fires. From all that I can see, absolutely nothing, just nothing at all. Yet the nucleus of the next extensive fires are already building up. At this stage I refer to the burnt leaves now falling in heavy amounts all over the surface, in some places up to six inches deep, from wind drifts or water deposits where run off takes place. I know this because I have been burning them. Also erecting rock barricades or making water levies to prevent fast run offs. You see, after big clean burns such as this one, run-offs are very extensive, first under heavy rain conditions, this causing soil erosion.

Top soil losses are inclined to be rather heavy when we have no top protection. These soil losses are never taken into account when losses are assessed; yet this is often difficult to replace, that is if it is ever replaced. Next we have the remarkable reactions of nature. Right throughout this area there has been a terrific rejuvenation and germination of all forest seeds. It is probably the best in a life time, mainly because the terrific heat cracked all the seeds that had been lying there for years; and this coupled with the excellent early rains (the best in years) have brought this about.

To follow up this story, there are other troublesome sides such as sheer laziness, don't-care attitudes; and this contributed much to the recent disasters. (in my opinion is quite unnecessary). Then there are all the lands held privately; also vested areas in this or that authority, such as a National Park Board or other. Many of these people who constitute a board may have the best intentions in the world, yet they do nothing; hence the results. These same people would not even know or understand what the real menaces are in all the exacting circumstances. (The occasional one may do so).

Lastly, we have forestry with all of its huge locked up territories, a tremendous task in itself - that is to keep it clean and free of big fire menaces. Here again we may be forgiven for believing that their fire protection policy leaves much to be desired, for these good reasons.

Firstly they have a policy of locked up timbers, locked up for the rainy day, and rightly so. Yet it becomes almost useless when huge fires take over and spoil them, spoiling by far the greater percentage. We could also say that it would be a fairly safe bet to say that little or nothing is being done now, while conditions are, and have been, helpful in clearing up all the unburnt patches. Having seen many areas one would think this could be carried out over the last two weeks of fine, dry weather; but no, not a thought is given to it. One will see odd private people doing small patches. (While we are on small patches what is wrong with this idea being carried out at suitable periods of the year?) Each and every year similar to the age old methods.

In these protective measures ideas, all breaks could be cleared, fixed and cleaned up before any high summer conditions prevail; (if not why not?) The unemployed could be usefully employed doing this job instead of hanging around doing nothing on subsistence moneys.

Modern transport camps etc., could easily cater for this.

We now come to organised methods of prevention. Local authorities, farmers and others all have ample modern machinery, cars, trucks, etc., and this could all be pooled for use; also, all knowledge, plans, and so on, could be pooled to be worked out under each local authority so that protective work could be carried out prior to summer. This could become a state wide worthwhile work, while after a few years this would be permanent. Communications such as wireless, telephones, would not even be necessary, while it could be that ultimately there would be no bush fires to fight; consequently no losses would occur such as was experienced in the year of 1961.

BY THE COMMISSIONER: When you refer to these gale force winds that have developed in recent years due to the felling of the timber, have you got any actual evidence that the gales are of much greater force now than they were, and more frequent, or are you just relying on memory?---No; right up until this year - the first one was in the years 1913-1914, when a cyclonic storm formed out of its normal track. And that is what is going on at the present time: Cyclonic storms are having an abnormal effect. They are the cause of the menace;

they are causing soil erosion like never before, even in the Swan Valley.

You mean due to the felling of the timber?---I am sure of it. The north-west of our country has practically no trees -- only scrub growth. All the north-eastern country of Western Australia has been cleared; and you can keep on going until you are near Cape Leeuwin, if you wish. All our winter rainstorms at the present time are hundreds of miles below Cape Leeuwin. At one time they used to be between Perth and Cape Leeuwin.

Is your information the result of your observations?---Yes.

You mentioned the year 1914. That is a long time ago. Here you go back about the last 20 years?---Yes.

But it goes back farther than that?---Yes, certainly.

How far back does it go?---I could not go back past 1913-1914. Up until that time we had considerable country of bush without a great deal of timber being removed.

Your suggestion is that at that time those cyclones were not so frequent?---Quite. I do not think so. As far as I know, they were not. They have not been so frequent from 1913-1914 up until recently. There were occasional ones. They were very seldom off track like they are now.

When you talk about bush seeds germinating following a fire, have you watched that pretty closely?---Yes.

Do you know what species they are?---Jarrah and redgum, and practically every forest sort there is, I imagine.

You think it is fire that brings them up?---Mostly the seeds do not show the same germination. You have your rejuvenation period periodically. It is only a few years ago when the present Conservator of Forests gave a talk on this subject.

You are sure they are new seedlings and not shoots from old stocks?---No; they are seedlings. I have pulled many of them up as I wanted to make sure they were not suckers.

If it was the fire that made them shoot, it would be a good idea to burn the seeds before planting them?---There is a method of putting seeds in a sheet of paper and setting fire to it, and letting Nature do the rest by the application of water.

Were there any other sorts besides jarrah and redgum?---Many types of scrub are rejuvenated and growing more vigorously. They always grow vigorously after a burn, and so does feed.

You speak of the don't care and lazy attitude on the part of some people. Do you see that more in some districts than in others?---I think you can see it mostly all over the place.

You think it is general?---Yes; and modern machinery is more or less to blame.

Have you travelled over the State much in recent years?---From the Murchison roughly to Esperance, and I have flown over most of the country and I have flown over Tasmania and have seen bushfires in the Blue Mountains.

You refer to the people in charge of the National Park Board and you say that although they may have the best intentions in the world they do nothing and would not understand the real menace in all the exacting

circumstances. Do you know any members of the board?--No; I have not the faintest idea who they are. I never see them in the locality where you should see them.

You say you think it would be a fairly safe bet that little or nothing is being done now to clean up the forests while conditions are helpful to do that sort of work?--Yes.

Are you referring to any particular district?--Naturally I watch the district I am mostly concerned with.

What district is that?--Gooseberry Hill-Kalamunda.

And Mundaring?--I do not know that Mundaring comes into it. It is the Darling Range Road Board area.

I was thinking of the forestry district?--There are many burnt patches that could have been burnt in the last dry spell that will be there for the next bush fire to commence in.

Have they been doing any burning off at all?--A few private people, but nobody else.

What about the Forests Department?--I have not been in a forestry area; it is too far away from where I am. A Forestry employee informed me that a few years ago all this preparation work used to commence in July in favourable conditions. If that is not done now, then there is something not being done.

You speak of organised methods of prevention; in other words of aligning all local authorities and farmers, and all those who have machinery, in order to carry out this firebreak work prior to the summer. Don't you think that is a job the Bushfires Board could undertake?--Not unless it has the wherewithal to undertake it with.

I mean the organising?--They could undertake the organising, but there is a weakness there, and it goes into the metropolitan area fire brigades and local authorities. We have vacant blocks all around Guildford and we have approached both authorities to get these blocks burnt off, but the fire brigade has no authority to enter,

and the local authority does nothing; and that is the menace - it is the menace the other gentleman was talking about with regard to co-operation between the Fire Brigades Board and local authorities; or the need for an Act of Parliament.

But local authorities have the power to get that land cleaned up?--Yes, but they do not use it. They flatly refuse to do it in most cases.

You will have to change some of your local authorities?--That comes back to saying that some understand, but others do not.

Have you anything else you wish to say?--I have some more information here, and I have some photographs showing what the Karridale country used to look like in 1927. In those days we had the devil's own job to get a fire to burn at all irrespective of what condition the bush was in because we never had the winds or the temperature to do it with.

The temperatures would be the same in those days as they are now?--I can remember it being 100 deg. in the caves in the Caves country. (The witness presented and explained some photographs to the Commissioner.)

(The witness retired.)

THOMAS WILLIAM PEARSON, recalled and further examined:

BY MR. PURSE: You were making suggestions regarding the Chief Fire Control Officer. Your district, as I know it, is under three controls: Yarloop, Harvey and Brunswick, and the Chief Fire Control Officer is the Road Board Secretary?--Yes.

In your Brunswick area, do you know of a man who, given full powers, could handle the Chief Fire Control Officer's work of that area?--The man we have in mind at present is in Harvey. Could I mention his name?

No, I do not think so.

He could handle your district of Brunswick Junction, too?--Yes, he is very versatile. Possibly, then, he would have to have an offsider, or perhaps a committee of three and one of the representatives could be the deputy head of the Forests Department. We feel he would be a very efficient man.

When you talk about a chief fire control officer you seem to be thinking along the lines of a Government appointed man?--No, we do not want a Government appointed man. We want him to be recognised by the Government and to have all the powers without his getting into any trouble. We want him to be in a position whereby, if he makes a mistake there is no come-back.

You feel, quite definitely, that a local man is the one you want?--Yes.

BY THE COMMISSIONER: And when you say you want a Government appointed man you want a man who would be officially recognised by the Government?---Yes.

BY MR. HALE: In your recent protective burn in the coastal area you mentioned receiving co-operation from the Forests Department. Do I understand that to mean that you did not receive co-operation from other departments apart from the Forests Department?---Yes, we did have an extremely well-controlled burn. I stress the point that we did get every co-operation from the Forests Department and, by doing so, the department had less worry than it ever had. The fire had to come and it could have been a serious affair if it had not been under control.. If it had got a start and got away without control it could have taken some handling. The control of fires is totally different from what it used to be. Mechanisation has made a great difference. At one time we looked upon water as one of the best means to put out a fire, but we do not today. We like a quick-moving free linkage tractor to handle the dirty country. Under normal conditions, where it is reasonably possible to get a backburn, we would stop a fire.

(The witness retired.)

THE COMMISSION ADJOURNED.

THURSDAY, the 25TH MAY, 1961.

GEORGE LEWIS LADHAMS, Timber Mill Manager, Serpentine, sworn and examined:

NORMAN SEYMOUR FLETCHER, Farmer, Keysbrook, sworn and examined:

BY THE COMMISSIONER: You have prepared a statement for presentation to the Commission?

MR. LADHAMS: That is correct.

BY THE COMMISSIONER: Will you read it, please?

MR. LADHAMS: Very well. This is the statement --

Evidence to be given by Mr. George Lewis Ladhams, Chief Bush Fire Control Officer for the district and Norman Seymour Fletcher, Bush Fire Control Officer, who were in direct control of the fire in question. This report was made out immediately after the fire at the control point at Keysbrook on 26th January, 1961.

BY THE COMMISSIONER: Who made out this report?--

MR. LADHAMS: It was made out by Mr. Fletcher, Mr. Harold Straker, a bush fire warden, Mr. James Glennie, a road board secretary, and myself.

BY THE COMMISSIONER: I think I should tell you that Mr. Straker presented this report to his board, and it has already been presented in evidence to the Commission. So there is no point in our going over the whole of that ground again. I think we will take it as presented by Mr. Straker with the exception of one or two points.

MR. LADHAMS: Very well.

BY THE COMMISSIONER: The report, as far as I can see is identical until you come to the summary

when you have added one extra paragraph to that which was contained in Mr. Straker's statement. You say, "Patrolling of the whole front was carried out for approximately three weeks after the fire." That was not in Mr. Straker's report because, I presume, it was not in the original report.

MR. FLETCHER: No; but in fact the farmers patrolled for three weeks, some in the morning and some in the afternoon.

BY THE COMMISSIONER: The recommendations vary, too, I think.

MR. LADHAMS: The recommendations mainly came from a road board conference in conjunction with bush fire officers, which, of course, was some time after the first report was made out. The first report was made out immediately following the fires. Our summary and recommendations have been subsequently added.

BY THE COMMISSIONER: Some came from a meeting of road boards, I think.

MR. LADHAMS: That is right.

BY THE COMMISSIONER: The recommendations are entirely different from Mr. Straker's report because, apparently, they resulted from meetings which were held later.

MR. LADHAMS: That is correct.

BY THE COMMISSIONER: You are both familiar with the report?

MR. LADHAMS: Yes.

BY THE COMMISSIONER: You do not need it to be read now?

MR. LADHAMS: That is so.

BY THE COMMISSIONER: If you will read your recommendations, which differ from those in Mr. Straker's report, that will complete the presentation of your part of the evidence?

MR. LADHAMS: Certainly. The recommendations are as follows:-

1. Complete wireless network be provided by the Bush Fires Board. Each fire warden district to be provided with a wireless network, to be stationed in Perth, but at the immediate call of the warden. Note - by being placed in a central control, necessary maintenance could be done on same.

2. More controlled burning be done by the Forests Department throughout State forest.

3. More co-operative burning between Forests Department and land-owners adjoining State forest.

4. Special Government grants, exclusive of Commonwealth aid road works, be given to local authorities to be used in making trafficable for firefighting present surveyed roads, which are uncleared or untrafficable.

5. Support of the Forests Department officers' suggestion of a road in State forest from Serpentine River to Murray River, adjacent the farm land adjoining State forest, as a buffer area for fires coming either from forest land or cleared land.

BY THE COMMISSIONER: At the commencement of your report you say that at approximately 5 p.m. on Sunday, the 22nd January, the fire control officer for Keysbrook . . . Who was that?

MR. FLETCHER: It was me.

BY THE COMMISSIONER: You say that the fire control officer for Keysbrook received a call from a forest officer. Who was the forest officer?

MR. FLETCHER: I got the call indirectly. It came from one of my employees - to be at the forester's hut immediately for a conference.

BY THE COMMISSIONER: It was a 'phone call?

MR. FLETCHER: Yes. I received it through one of my employees. He told me I was wanted out in the forest.

BY THE COMMISSIONER: In the second paragraph you refer to Monday, the 23rd of January, and at the end of that paragraph you say, "Then took fire through swamps in northerly direction to South-east corner of Location 267. All other fronts mainly held. A number of jump areas put out." Were they jumps from the backburn or from the main fire?

MR. FLETCHER: They were jumps from the back-burn.

BY THE COMMISSIONER: Some evidence has been given to the Commission that the Forests Department refused to allow settlers to do protective burning prior to the fire season. Do you know of any instances of that?

MR. FLETCHER: It is not permitted in our district. The Forests Department will not permit settlers to burn in any circumstances. Even we, as fire control men, cannot light a fire without a Forests Department officer being there.

BY THE COMMISSIONER: They can prevent people from burning on their own property?

MR. FLETCHER: Yes, within two miles of the forest area.

BY THE COMMISSIONER: And they will not permit you to burn within your own properties at any time of the year?

MR. FLETCHER: No.

BY THE COMMISSIONER: Who gave you that advice?

MR. FLETCHER: We know. Our settlers, in the forestry area, assure us that they are not permitted to burn even firebreaks to protect themselves though they may be threatened with a fire.

MR. LADHAMS: That is, within the forest area.

BY THE COMMISSIONER: I understand that, but I am wondering whether the people who advised you really had a sound basis for what they said.

MR. FLETCHER: That is what Mr. Skinner told me; that he was not permitted by the local forestry man to light in any circumstances.

BY THE COMMISSIONER: You have not checked that.

MR. FLETCHER: Except when we burned back on the Sunday night. We made sure that we had a Forests Department officer to light the first fire.

BY THE COMMISSIONER: They were referring to people on the scarp.

MR. FLETCHER: On the scarp we can get permission to burn, but we cannot burn without permission.

BY THE COMMISSIONER: My understanding of the position was that even though you are within two miles of the forest you still have to get permission from the Fire Control Officer, and the Forests Department can, in short, say, "You must not burn in any circumstances because the position is dangerous."

MR. FLETCHER: That is so.

BY THE COMMISSIONER: I would like to get this clear: along that western escarpment there have been cases, you believe, regarding which the Forests Department has said, "You cannot burn at any time"?

MR. FLETCHER: Yes, I can give you an assurance of one instance myself. This fire occurred on a Sunday afternoon. My wife was in hospital and I had been up to see her and, before I left, I observed the fire on the hill. By the time I got back the settlers were all standing around wondering what to do, as the fire was coming through. I asked them why they did not burn back and they said, "The forestry man said we were not to burn back under any circumstances." I said to them, "We will burn back." The forestry man had gone home. So the farmers burnt back as the fire was coming over the top of the hill. We sprayed the ground and burnt back on a wetted line.

BY THE COMMISSIONER: That is not what I had in mind. I have been thinking of protective burning before the fire season really got bad.

MR. FLETCHER: I doubt whether the Forests Department would allow us to do that; I am certain they would not.

BY THE COMMISSIONER: You would give the Forests Department officer due notice and, at that stage, he would say, "No, I am sorry, but you cannot burn".

MR. FLETCHER: Yes, I understand what you mean, and that is correct.

BY THE COMMISSIONER: In this report reference is made to the fire jumping the highway. Can

either of you say whether that was an escape from the back burn?

MR. LADHAMS: It was definitely an escape from the backburn with a howling easterly at 5 a.m. on Tuesday, the 24th.

BY THE COMMISSIONER: There was another case in which the places of Skinner and Fawcett were burnt. I do not know whether they were the two affected in this instance, but one of them there said that they were burnt as a result of a jump from the backburn.

MR. LADHAMS: It probably was in the case of Fawcett, although both fires were joined. That could be possible the way the wind was coming; that is, that it was burnt from the backburn.

BY THE COMMISSIONER: We have had quite a bit of evidence about these fires from officers of the Forests Department, the Bush Fires Board, and others, and I think we have the general situation fairly clear. The one matter I would like you to try to enlighten me on -- and I think you can do it better than anybody else -- is in regard to the northern end of the backburn. It has been suggested that there was no need to light that backburn.

MR. LADHAMS: I think you are referring to the one from the 36 to the 38-mile.

BY THE COMMISSIONER: That is right.

MR. LADHAMS: Yes, that backburn was decided on about 11 o'clock on the Monday night. After we got a ring that the fire had jumped Gobby's road it became necessary then for us to move our forces back and to take up a second line of defence. We had what we call the 36-Mile Road running due east which was a good buffer to burn to and to burn along. We had a conference at the control point between Mr. Fletcher, Mr. Harold Straker, Forestry Officer Gordon Styles and myself, and we decided that the backburn from the 36 to the 38 mile was necessary. We also made plans to burn back from the 36 to the 34-mile should that become necessary. It did not become necessary and we did not do it, but so far as the burn back on the 36 to the 38-mile was

concerned, that was definitely decided on and definitely carried out, and next morning we continued to burn up the 36-mile road to tie the fire in and to save it going further north, which operation was successful. The fire was further north on another sector. At this stage I would like to place a map before you to make the position clear.

THE COMMISSIONER: After describing the events on the map (Exhibit "A 9"), Mr. Ladhams and Mr. Fletcher inform me that the first backburn they put in was south and extended east from Skinner's block. The next backburn they did was from the corner of location 141 and Palmer's Road and through 1134 to its northern edge. This backburn was discarded because it was running into very rough country and some jump-overs were already occurring from the main fire. That backburn fizzled out in some bulldozed country. They then came back to the junction of location 234 and 141 and Palmer's Road, and burnt along the western side of location 141 through 355 and 278; the eastern side of location 59, through 294 to 280; and then to the junction of Road No. 3099, or Gobby's Road and the main highway. At the same time a backburn was put in from location 600 along Gobby's Road to join up with the previously mentioned backburn on the main road. A backburn was started from the north-east corner of location 600 and carried in a north-easterly direction to Clinton Road. That was done on Monday afternoon. On late Monday afternoon this firebreak was continued along Spencer Road to the south-east corner of location 267.

THE COMMISSIONER (Continuing): A jump-over occurred about the centre of this backburn into a swamp area just east of Location 672. All forces were then withdrawn to the western end on the highway of Road 36. On late Monday afternoon or evening a jump-over occurred from the south side of Gobby Road on to Location 1375. A conference was then held at which were present Mr. Ladhams, Mr. Fletcher, Forestry Officer Styles, Warden Straker, and others. It was decided to burn from Gobby Road through Locations 291, 298 and 1157 to the southern boundary of Location 474, and thence westwards to the main road; and then along the main road to the 36-mile road. During that backburn a jump-over occurred across the main road into Location 250 at approximately 5 a.m. on Tuesday morning. This was extinguished. This jump-over occurred from strong easterly winds at that time. The backburn was then carried up road 36 almost to Location 1166 and then in an east-south-easterly direction to the junction of Clinton Road and the backburn from Gobby Road at Location 600. On Tuesday morning a reconnaissance was made of the country round about Location 672, and a backburn was run from the 6-Mile road to the Serpentine River in a north-easterly direction. Was that the position?---(MR. LADHAMS): I agree that what you have said represents the actual position with regard to the backburning that took place under our control. (MR. FLETCHER): I also agree that what you have said represents the actual position with regard to the backburning that took place under our control.

Taking all the circumstances into consideration -- what you did know, what you did not know, what you thought reasonable, and what you thought might happen -- are you satisfied that all the backburning you did was tactically reasonable and sound?---(Mr. Ladhams): I am quite sure it was.

We have heard evidence to the effect that you did not entirely agree to part of the later backburning being necessary, but that as it had been started you thought it should be finished?---(MR. LADHAMS): It is slightly incorrect. The part I did not agree to was the backburning to Road 34. I do not say that if that fire had not jumped the 36-Road I might not have agreed to it. I would have, but under the circumstances it was not necessary.

Is there anything else you would like to say about the operations in which you took part, apart from the report and what has been given?---(MR. LADHAMS): I do not think so. What I have said covers the position pretty well. During the whole set-up, to the best of their ability the Forestry did co-operate with us. Mr. Styles was there on several occasions, and Mr. Beggs gave us permission to do what I thought necessary; he gave us a free hand. Although their hands were full in other places I felt they could not have done anything else to help us. We are quite satisfied with the co-operation that they gave us.

BY THE COMMISSIONER: As far as the future is concerned I understand you have already arrived at an understanding and through some conferences that will be held to achieve better co-operation than existed in the past?---(MR. LADHAMS): That is correct. We have already started on those lines.

BY THE COMMISSIONER: Are there any suggestions which you wish to make with regard to any advisable amendments to the Bush Fires Act?---(MR. LADHAMS): Not at this juncture.

Are there any points you would like to raise with regard to the burning periods?---(MR. LADHAMS): These come up regularly for discussion each year. Every local authority has the right to discuss those dates and make recommendations. The recommendation made this year was that the opening and closing dates should

remain the same.

COM Some people, not in your district and not members of local authorities, have complained that inadequate consideration has been given in particular to the opening of the restricted burning period. Were there any complaints in your district on that score?---(MR. LADHAMS): There might be some individuals who would like the date to be opened sooner, but generally speaking I would not like to see it opened sooner.

COM Sometimes you have heard the complaint about the season being opened too soon?---(MR. LADHAMS): Yes.

COM The complaint is that the local authorities do not give sufficient consideration each year, but simply accept the practice of the previous years, and that they do not take into account the difference in the seasons?---(MR. LADHAMS): We can put back the opening date a fortnight, with the permission of the Minister, if we consider the position to be dangerous. I do not think we can improve very much on that procedure.

COM Do you have an advisory committee on your road board to assist you in making these decisions?---(MR. LADHAMS): We have our bush fire control officers who put in their recommendations.

Are your bush fire control officers all members of bush fire brigades in the road board area?---(MR. LADHAMS): No. We have no bush fire brigade in the road board.

COM Do you not agree with bush fire brigades?---I do not know. I have never seen how bush fire brigades work. We have been happy in past years with our set-up of bush fire control officers working in conjunction with the local authority. Up to now there has been no room for complaint.

You organise your settlers under the bush fire control officers so you have something equivalent to a bush fire brigade?---This is on a voluntary basis and whenever there is a call by the fire control officers for assistance everybody turns out. You cannot get much better than that.

There is one advantage you might get from your bush fire brigade -- unless you do it -- that is you can plan the dispersal of your equipment?---We still do that.

Then it comes to much the same thing. With regard to the enforcement of the Bush Fires Act concerning notices on people for the construction of firebreaks and the destruction of hazards, do you do that?---Yes, we insist on a firebreak being ploughed around made roads by the 30th November every year. Anybody who does not carry it out is prosecuted.

Do you stipulate any widths?---Yes.

Does it vary with the location?---It is a 6 ft. ploughed break. We encourage everybody to burn from that. We do not enforce it because it is hard in some cases to enforce; but where possible we encourage them to burn from it.

You do carry out prosecutions if they do not carry out the instructions?---Definitely.

Have you had any prosecutions recently?---Unfortunately, one or two each year.

Do you issue such instructions with regard to the escarpment and in bush country to destroy hazards?---No, that comes under the Forestry.

MR. FLETCHER: Bush fire control officers have their own organisation and after the 30th November we go around and inspect all properties to see if there are firebreaks. If there are none we insist on them. If they

do not put them in we get the road board to do it and then charge them and prosecute them.

BY THE COMMISSIONER:

I am under the impression that in your road board you have excellent control of the lower country, but have neglected the scarp?

MR. LADHAMS: We cannot touch that -- it is Forestry.

BY THE COMMISSIONER: It seems to me there has been some laxity on both sides in getting in touch with each other in trying to cover that flank?---It is on the edge of their concession when it gets to us. Perhaps there could have been more co-operation in view of that. We will get that from meetings we have held.

This Commission has to report upon the basic requirements for a State Emergency Service. At the present time your requirements in emergency are being met by the State Emergency Service, and it seems to me they did quite a good job. I am wondering whether you see the need for something between the man in the field who actually lives on the spot and fights the fire in his district and the State Emergency Service which is a Perth-based service. Did you find the lack of any co-operation or liaison hindering you at all?---I cannot say we did. I do not know what Mr. Fletcher's views are on that.

MR. FLETCHER: My feeling is that provided fires are not going for a great length of time the local people are the best to handle them. Where we had such a fire as the last one the local people cannot go on for too long, and then comes the difficulty of getting them relief. If it had not been for the Army I do not know what we would have done. Men had been on the fire front for 30 hours and they could not have stayed any longer. The Army came along and took over patrolling during the day and this enabled experienced firefighters to sleep. We knew we would require them again in the evening because by that time the east winds come in

strongly. If it had not been for the Army I do not know from where we would have got men. Men would have dropped on the line and the fire would have got away. It is better to have a disciplined organisation helping like the Army than it is to have people from the towns assisting, who frequently are a menace because they do not understand. I feel that a disciplined body of men would be of extreme value in cases such as we have just been through. Whilst this is not for me to suggest I think it would be a good idea if it were part of the Army's training so they can assist in emergency in such fires, as they did. But their services were excellent and they were marvellously disciplined. They just lacked direct bushfire experience. Had they had this they would have been more valuable still; and it would be a good idea if it could be included in their training and we were able to call on them when necessary.

BY THE COMMISSIONER:

I can say that to my knowledge there have been lots of efforts made to have the military people train their personnel in firefighting. However, as military men all their time is occupied in receiving training for their particular work in the national defence and they have sound objections to training in firefighting. I am wondering nowadays if we could find some other force to meet that position.

MR. LADHAMS: They were very helpful to us. When Major Clark arrived with the men he said, "They are under your control. What do you want us to do?" They were completely helpful and very good.

BY THE COMMISSIONER: What I was really referring to in my original question on this subject was wether you did not need some additional assistance from people who understood firefighting and what it meant between the man on the field doing the firefighting and the State Emergency Service. I am speaking of the Bush Fires Board; whether an extension of their services or perhaps some other organisation similar to that could have

improved the situation in the recent fires?

MR. LADHAMS: They could have in communications if they had had a wireless network.

MR. FLETCHER: We were fortunate in that the police assisted before the Army arrived with the Signal Corps. However, it was only on a limited scale but what we got saved a tremendous amount of man hours and time.

BY THE COMMISSIONER: I understand their sets are rather short-range in certain circumstances?

MR. FLETCHER: Yes.

BY THE COMMISSIONER: You spoke of the necessity for more controlled burning to be done by the Forestry Department throughout the State forests. Are you taking into account that they do more extensive burning nowadays than they did a few years ago?

MR. FLETCHER: Yes.

BY THE COMMISSIONER: You think they should do more than at the present time?

MR. FLETCHER: Yes.

MR. LADHAMS: We consider that all forests should be control burned every two years.

BY THE COMMISSIONER: What you are up against is the Forests Department finding sufficient money and men to do the burning and do their other jobs too?

MR. LADHAMS: Yes.

BY THE COMMISSIONER: If they do this, who is going to pay for it, the sawmillers?

MR. LADHAMS: Probably.

BY THE COMMISSIONER: You recommend special Government grants exclusive of Commonwealth aid for road works to be given to local authorities for making trafficable roads for fire-fighting purposes. On this question of Government grants I have been informed that your road boards at a meeting deliberately turned down a motion that the Government should be asked to assist road boards with fire-fighting equipment?

MR. LADHAMS: That is correct.

BY THE COMMISSIONER: Do you think you have more chance of getting money from the Commonwealth than you have from the State? Is there a difference between making a request for money for equipment and making a request for money for improvement of roads?

MR. LADHAMS: I think the money for the equipment was turned down on a more or less local basis. A lot of the delegates at the conference had already bought their own equipment and they felt that those boards which had not done so should have. They therefore felt it was to their disadvantage if money was made available when they already had the equipment. I think that is the reason the motion was turned down. But as far as opening up uncleared roads is concerned it would be a great advantage. You have to go 10 miles around to get to a place although there might already be a surveyed road closer, but it is not cleared.

BY THE COMMISSIONER: Yes, I can realise the benefit of getting those roads cleared, provided they were maintained. Would the road boards maintain them once they were cleared?

MR. LADHAMS: I think they would have to.

BY THE COMMISSIONER: As a fire protection measure?

MR. LADHAMS: Yes.

BY THE COMMISSIONER: I am not altogether impressed with the validity of the argument that because some road boards had the foresight to provide equipment those which have been unable to do so should not receive some Government assistance.

MR. LADHAMS: Well our board was the one which proposed the motion, so I fully agree with you on that matter.

BY THE COMMISSIONER: I see. This suggestion of a road in the State forest from the Serpentine River to the Murray River has only been a discussion between individuals in the Forests Department and the road board?

MR. LADHAMS: It was put up to us for discussion by the forest officer in control at Dwellingup, Mr. Campbell, and we fully agreed with it .

BY THE COMMISSIONER: He did that on an official basis?

MR. LADHAMS: Yes.

BY MR. OATES: You mention that there was a conference held between, I think, four of you. You two gentlemen were involved and Mr. Styles, and I have forgotten the other?

MR. LADHAMS: Mr. Straker.

BY MR. OATES: It has been said in evidence previously that Mr Styles did not agree to the back-burn between the 36 and 38 Mile pegs. I am wondering whether you can tell the Commission whether there was a unanimous decision.

MR. FLETCHER: Mr. Styles agreed definitely?

MR. LADHAMS: Mr. Styles definitely grade to the back-burn to the 36 Mile road. He was against the back-burn to the 34, and so was I at the time, but he was definitely in favour of the other one.

MR. FLETCHER: He did definitely agree. I was at the conference.

BY MR. OATES: The other question is in relation to the other back-burn not put in from the 36 to 34 mile pegs. You said that you did not believe it should be put in. It has been said that in actual fact the reason was that you were actually ordered by forestry officers - and one witness said a policeman was involved - that it should not be put in. Can you confirm that?

MR. LADHAMS: That is complete fairy story. As far as I am concerned I never saw a policeman.

MR. FLETCHER: The only one I saw was our own.

BY THE COMMISSIONER: I do not think they were concerned.

MR. FLETCHER: The only control officer I saw was Mr. Styles throughout the whole fire.

BY THE COMMISSIONER: This was a case where Mr Sstyles and a policeman came along to the actual men threatening to light the fire?

MR. LADHAMS: I do not think any fire would have been lit without Mr. Fletcher and myself being aware of it and we knew nothing about it.

MR. FLETCHER: It was never proposed at any stage, unless the fire got over the 36 mile road, to light to the 34 mile road. It was only a plan we had in case. We knew we would have another line of defence if necessary, but never was it discussed that we would actually do so.

BY MR. OATES: You have said you thought that people from the town in the case of a fire were a hazard.

MR. FLETCHER: Yes.

BY MR. OATES: Has it occurred to you that there was a definite civil defence role here. In the event of an enemy attack on this country the occurrence of fires would be more disastrous and more widespread than the fires we have just experienced and in that case the whole of the civil population would be involved because the Army would be fully occupied? Do not you think that something ought to be done to train the ordinary townspeople so that they might become a little more efficient in helping this in cases such as these.

MR. FLETCHER: It would be an excellent idea if it could be done. I do not decry the people who came to assist us at all. We had marvellous assistance from many sections of the community but there are a number of people who come who do not understand it at all and they are really a problem rather than of assistance. But we

did have tremendous help from people from Fremantle from various organisations. The oil company at Kwinana sent men and various road boards did also. However, we did have a fair amount of trouble from curious people who liked come to see what is going on.

MR. LADHAMS: Car loads of people came out of an evening with no experience and no equipment. They were of no help at all. They could even go up and get cut off.

MR. FLETCHER: And you would go away and not know they were there.

BY THE COMMISSIONER: It has been said that even had they been willing and even had they the equipment you would have had to rake up experienced fire-fighting men to supervise them.

MR. FLETCHER: Exactly.

BY THE COMMISSIONER: I want to make something clear in regard to a question Mr. Oates asked you. The information we received in regard to the policemen was only hearsay evidence given by a witness who had compiled a story not from his own observations but from hearsay evidence, and the commission does appreciate that that type of evidence does some times get on the wrong track?

MR. LADHAMS: Yes, sir.

BY MR. McARTHUR: You specifically mention the opening up of old surveyed roads. Do you anticipate that they would be trafficable for fire-fighting vehicles only or for public use also?

MR. LADHAMS: For fire-fighting vehicles, and from then on the local authorities would improve their standards.

BY MR. McARTHUR: In addition to those roads which in some cases are on good grades and in some cases are not, would you also need a network of what you might call jeep trails or four-wheel drive trails so that you would have access to the hills?

MR. LADHAMS: No. We now have four or five points of access and once there, there are quite a number of forestry tracks. Admittedly they have no names. I understand the Forests Department has maps but they are not available to us.

BY MR. McARTHUR: It would be of great advantage to you people if such maps were made available?

MR. LADHAMS: Yes, definitely.

The suggestion was made by the Commissioner and Mr Oates concerning the possible training of townspeople. Do you think the police might play some role there? For example, if you got groups of people interested and trained, and the police could possibly bring those people out to you -- deliver them to you on the fire line?

MR. LADHAMS: Yes, provided they had the equipment. They would be of no use to us without equipment.

Somebody has to supply that equipment?

MR. LADHAMS: Yes.

THE COMMISSIONER: I do not think that there is anything else you can contribute at the present time; unless there is something either of you wish to advance that may be helpful?

MR. LADHAMS: I have nothing more.

MR. FLETCHER: I have nothing more.

BY MR. PURSE: In connection with that suggestion of yours for the purchase of equipment or the assistance of the Government, I think the intention behind that, actually, was for road boards to purchase heavy four-wheeled tankers rather than the ordinary firefighting equipment of farmers.

MR. LADHAMS: That is right.

BY THE COMMISSIONER: Could we have the map as an exhibit?

MR. LADHAMS: Yes; but I would like to have it back later.

CHARLES HERBERT PRINCE, Farmer, of
Gingin, Sworn and Examined:

BY THE COMMISSIONER: Would you please give the Commission your name?---Charles Herbert Prince.

And your address?---Gingin.

And your occupation?---Farmer.

Are you a landowner?---Yes.

And your property, I take it, is fairly close to Gingin?---Yes.

You have said that you would like to have the opportunity of presenting some evidence and observations to the Commission with regard to bushfires in this State. Have you prepared any additional copies of that evidence?---Only a letter which I have here from our Chief Fire Control Officer.

Have you more than one copy?---Yes.

And that will be part of your evidence?---Yes, part of it.

Are you a fire Control Officer yourself?---Yes.

Are you a member of the Fire Brigade?---Yes.

Are you a Captain, Lieutenant, or just a member?---A First Lieutenant.

Please proceed to tell us what you wish to say on the subject of bushfires?---Yes. On reading some of the earlier evidence, it occurred to me that you were receiving a fair amount of evidence of fires that had been lit and had escaped and done a considerable amount of damage where the requirements of the Act were not observed. I have recently been involved - in fact, I am the victim of a case where the Act was observed. Every precaution was taken, neighbours notified, breaks in excess of the requirements, and the number of men in attendance in excess of the requirements; but the fire did damage due to abnormal circumstances on the following day; and I was on no better footing than the man who had ignored the lot.

Except that you were not liable to prosecution?---No.

And he would be?---Yes. There is an angle there which I would like to mention later.

You are speaking on the question of damages?---Yes.

I am not a legal man, so I would not have much idea about it; but I will accept what you say?---I have the whole case here. The case was submitted to a Queen's Counsel in Melbourne, and I have his opinion. I have the evidence that was submitted to him, and his opinion is here.

Would not the other side have to prove negligence?---No. It means that the law abider is on no better footing than the person who disregards the lot.

Have you any suggestions to make?---Yes, I think I have. May I read through this submission of mine?

THE COMMISSIONER: Yes.

THE WITNESS: It reads as follows:-

> In an endeavour to rectify an anomaly which is glaringly evident when our civil law is deciding claims arising from bushfires which have got out of control, I wish to submit my own case of which I have the details with me.
>
> In this case I think it is proved that every reasonable precaution was taken and every relevant section of the Bush Fires Act complied with, and yet when freakish weather conditions developed the following day and the fire escaped, as did many others for the same reason, the considered opinion of a Queen's Counsel and another competent lawyer was that claims arising from this escaped fire would have to be paid as I had no more defence than the man who callously and selfishly breaks every rule in the book.
>
> Now, forgetting the personal angle of this case, let us consider the reaction of farmers who are now mostly aware of this peculiar state of affairs. The first thought that comes to mind is, why go to the trouble to get a permit? It serves as no protection but does establish irrefutable proof of who lit the fire. Why have a Fire Officer come and inspect the precaution you have taken as it serves no purpose in case there is a claim?
>
> Another unpleasant thought, but one that has been freely discussed and used, as a means of defeating this anomaly, is that if the location of your proposed fire is in a dangerous area, better to place a candle in a patch of grass and then go to the beach for the day; neighbours will care for the fire if they are threatened and proof of who lit it would be difficult to establish.

That did happen in our district. An absentee property owner had a large area of bulldozing. This cannot be proved; this is purely an opinion, which can be substantiated partially but not wholly. He had this large area of bulldozing in country fairly remote. One Sunday in January he came up and dropped a match. He was in the district on that Sunday, and the fire went up that day.

Being an excellent day for burning, he had a very successful fire - one which possibly saved him, we estimate, from £1 to 30s an acre in the ultimate cost of clearing it up. That was probably a 400-acre piece of country, so it could have saved him £500 or £600; and no one can prove that he lit it. I think this anomaly will cause that to happen on a greater scale as time goes on. I also think it will make the position of the volunteer fire officers impossible unless this anomaly can be corrected in some way. I am going to submit a suggestion later, but I would not know the mechanics of putting it into operation. I was going to suggest something to you which may bring about an alteration or may be grounds for an alteration. To continue with my statement --

> There has always been in existence amongst responsible and reputable farmers a code of ethics or unwritten law that if a fellow farmer is unfortunate enough to have a fire escape after having taken all reasonable precautions and having told and probably enlisted the aid of his neighbours, then no claim for compensation is ever thought of. Unfortunately this system can never be wholly successful due to a small unscrupulous minority who are not handicapped by any such code but are only too willing to cash in on another's misfortune.
>
> Referring again to the shortcomings of the Act, it would appear that a farmer who has done everything right in the preliminaries leading up to his burn, but who through no fault of his own the fire escapes to a neighbour's property, that neighbour can succeed in a claim for damages even though his own fire precautions are inadequate and not as required by the Act.

That was the opinion of my Queen's Counsel: that in regard to my fire, which escaped on to a property where the precautions were completely inadequate and not as required by the Act, he could still win the case and it was not worth taking to Court. To continue --

> At law, burning-off operations are classed as an unnatural usage of land. This description is quite baffling to me.
>
> I consider burning off as natural a usage of land as is the sewing of seed, the harvesting of grain or the fertilising of the soil. It is a standard recommendation of the scientists of our Department of Agriculture and the C.S.I.R.O. Their recommendation for the use of burning off is for initial clearing, control of re-growth, control of insect pests, and general sweetening up after long usage by stock.

I made another note last night --

> Unless something is done to separate the status of the law-abiding, conscientious farmer from that of the law-breaking callus opportunists, I feel that the volunteer fire officer organisation will eventually cease to exist.

The method of bringing an alteration about is very difficult because it is a basic law that you cannot damage other people's property. I am quite aware of that but it seems to me that if our volunteer fire officer set-up is going to function, they must have some inducement to offer the farmer and the farmer must have some inducement, too, to comply with those regulations. At the present time there is no inducement at all other than the possibility of a small fine, which is easily offset by the benefits from burning when conditions suit the farmer and by the money he will save when he comes to cleaning up his burning-off operations. It could easily amount to £1 to 30s an acre that he would save on his final clearing.

BY THE COMMISSIONER: I have known a lot of fires escape under similar conditions to yours, in different States of Australia, and I have never known a case where the neighbour who has suffered has accepted damages, even though they have been awarded to him, in a case where the fire was genuinely looked after and the provisions of the law were obeyed?---I received my receipt for the first payment last week.

It is a very unusual thing?---It does not happen amongst decent people, but unfortunately there are others amongst us. I have a good many statements here from other people. These statements were collected by an investigator who came up on my behalf. The statements are from people who suffered damage from the same fire; and they are all very favourable with the exception of those two. Some seven people suffered damage from this fire, and I think three or four of the statements I have here, or that this investigator obtained while he was in Gingin, are from people who suffered damage; and they are perfectly satisfied with everything.

Did you suffer any damage yourself?---Yes.

That generally influences the neighbour. I have known people to take claims for damages to Court and to be awarded damages, but beyond their expenses I have not known them to accept the damages awarded?---They have been accepted. I have received my first receipt.

Have you any suggestion as to how that can be overcome?---The only solution I can suggest is some insurance set-up. I think it would have to be compulsory for the premium to be reasonable; and until such time as a satisfactory premium is established it may have to be covered by the State Insurance. Possibly they could be the sole operators of it until such time as a premium is established. But at the present time the only cover a farmer has is a public risk policy, which has an awful lot of "ifs" and "ands" attached to it; and you could never take out a cover which would cover a situation such as happened several times last year. You could not take out a large enough cover. The premium is high because such a small percentage do it. If everybody was compelled to take out the cover and to benefit from that cover, the essentials would be to comply with the Act, and the premium would come down to a figure which would be quite reasonable I think. Actually there are very few fires escape where every part of the Act is observed. I do not think there is much doubt about that. Most of the trouble is from people who do not observe it fully; but there are those few.

Would you mind telling me what happened in your case when this fire got away?---I lit it up as arranged on a certain day. There were five people in attendance when I lit, and 13 there before it was completed; and five of them were fellow fire officers. The burn was put through on a day that was very cloudy. One of the reports I have here is from a fellow fire officer who advised me not to burn but to wait until a decent day. It rained while we were lighting, and we suspended lighting for three-quarters of an hour. The fire was patrolled that night and

all the neighbours left perfectly happy. The two that claimed helped me patrol the fire. One had the fire-fighting equipment and drums of water on his truck, and when we finished he personally emptied the drums out and asked me to return them. So he must have been perfectly satisfied that all reasonable precautions had been taken. I patrolled it again that night. I was out at the fire until half past 10, and everything was satisfactory, and burning stuff was thrown back for two chains from the only danger front. The next morning I was out at 7 o'clock with one of the claimants, and we had almost completed a patrol of this danger front when the gale started. As it got worse and worse, burning material started to roll along the ground; and, of course, the two chains, where we had thrown light material back, was insufficient and it eventually beat us. It broke through two or three times and we controlled it, but eventually it beat us and got on to grass land and did a considerable amount of damage.

What was the date?---The 11th March, 1959. Anybody in this State would be well aware of it: we had fires all over the State. There was the big Wagin fire on that day, and we had at least eight fires within 20 or 30 miles of this particular fire all due to the same circumstances.

What was the fire hazard forecast for the day?---It was dangerous in certain areas; rain developing. I have the full weather report here from Mr. Mackey. Then on the Tuesday it was again: rain developing.

How long is the report; is it too long to read?---No, I do not think so.

The report is for the day you lit the fire, is it?---Yes.

I only want the forecast for your district?---Yes.

(Witness handed the Commissioner a report on the weather forecast).

I meant that you should read it, but now that you have handed it to me I will read it for you. This report reads --

> Forecast issued for 24 hours as from 6 p.m. on the 9/3/59 -- "Fine and hot with moderate to fresh north-east winds. Further outlook cooler Wednesday night. Fire hazard dangerous. Wind east to north-east -- 10-15 m.p.h."
>
> The fire hazard forecast issued as from 6 a.m. on the 10/3/59 was "Hot with northerly winds. Afternoon sea breeze. Further outlook cooler, but humid. Fire hazard dangerous. Wind -- north-east 10 m.p.h., becoming light and variable in the afternoon".
>
> A fire warning was issued at the same time drawing attention to dangerous fire hazards in the west coastal districts and the southern, central, north-eastern and northern agricultural districts. Elsewhere it states that the hazard is expected to be severe, almost dangerous.
>
> For the 24 hours from 6 p.m. on the 10th March, the forecast was "Cloudy and warm with freshening northerly wind. Rain developing tomorrow. Further outlook -- cool change with showers." The fire hazard was "Severe to dangerous, north-east to north-west winds at 25 m.p.h."
>
> For the 24 hours from 6 a.m. on the 11/3/59 the forecast was "Sultry with some rain developing. Moderate north-east winds backing north-west later and freshening. Further outlook cooler." The fire hazard was "Severe to dangerous. Winds north-east, 15 m.p.h., backing north-west 15 m.p.h. in the afternoon".
>
> Mr. Mackey advised that these forecasts indicate that a change to cooler conditions was expected somewhere on the 11/3/59, but that dangerous fire hazards could easily be experienced on that day.

THE WITNESS: On a point of interest, I would mention that that should have read the lower west coastal area and not the west coastal area as stated there. Consequently, it did not cover the Gingin district.

BY THE COMMISSIONER: He was expected to give you a forecast for your particular district?---I was

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looking for a forecast when I went out. The condition I was looking for was "Change developing" the following day, not more than a severe fire hazard and a sea breeze which would blow away from the danger area. That was the forecast when I lit. The sky was completely overcast and rain was expected obviously and, in fact, it did rain and we stopped operations for three-quarters of an hour. The conditions appeared to be ideal and what I was looking for.

We have had quite a good deal of evidence given here about people misreading the forecast. When the weather forecast is "Rain developing in the near future", they have taken no notice of the fact that the fire hazard was "Severe to dangerous"?---Yes, but I think that is when the bulk of the burning is done.

Yes, I understand that, but I cannot help thinking that it is not justified in the circumstances?---The burning period is limited and many people have to burn. If you get a permit and you notify your neighbour that you intend to burn on a certain date, other people budget accordingly so as not to fall foul of that burn and arrange to burn two or three days later, but if someone does not do that it presents a danger to the district.

I understand that, but I cannot help but wonder whether fire control officers should not study the situation very closely on days when the fire hazard is severe and, in many cases, prohibit burning. I understand that it is inconvenient to the farmer if he cannot burn on those days, but it is a question of there being a danger of the fire getting away on those days?---I mentioned this fact to one of the officers of the Bush Fires Board when I visited the office of the board one day. I was informed there that most burning is done when the fire hazard conditions are severe. I believe even on days when the fire hazard is dangerous the fire weather officer can vary the forecast according to the local conditions.

Yes, he can give you a forecast for a particular area?---I do not mean from the meteorological angle; I mean that the forecast can be varied by a fire officer in a particular district. That officer can give permission to burn, taking the local conditions into consideration. We have not appointed a weather fire officer because we consider we are too close to Perth. However, I am sure that had we had one we would have obtained permission to burn because the report that we have shows that some people asked why we did not ask for permission to burn on a decent day.

What do you call a decent day; a dangerous day?---Yes, when material would burn more readily. That was from a man who suffered severe damage in a large adjoining property.

During these last fires down south, the conditions for burning were favourable in many cases and a man was looking to burn, but he overlooked the fact that the fire hazard was "Severe to dangerous" at the time, which could quite easily have gone to "Dangerous" before his fire was out?---Yes, and a man in this situation is no better off than a man who disregards all the warnings.

I appreciate your position. I am wondering whether you can give us any advice in regard to the Bush Fires Act and Regulations appertaining to bush fires.

Are you satisfied with your prohibited burning periods?---Yes. We make our recommendations each year. I am chairman of the road board and we handle those recommendations.

I expect the local authority to be satisfied, but do you get complaints from the people in the district that it might hamper their operations, or that you are too severe on some and too considerate to others who might wish to burn early?---We have had complaints on both sides. Some say that we do not open early enough while others say we open too soon, but bearing in mind that the board is comprised of farmers, I would say it is a pretty good cross-section of opinion.

What farming is carried out in that district?---Grazing -- more cattle than sheep.

I have heard it said with regard to fires that sheep grazing is much safer?---As you get more land developed the hazard increases. It is no use starting the summer with bare paddocks. You must have feed in your paddocks to see them through.

I merely mention that it is an opinion I have heard expressed by people that cattle-grazing is more dangerous than sheep-grazing with reference to fires?---That could be so.

Do you want to read the letter from the fire control officer, Mr. Fred A. Wedge?---Yes. I mentioned to Mr. Wedge that I was trying to get a hearing at the Royal Commission and asked him if he wanted to submit anything. He said that he had something which he would like first to go to the secretary of the Bush Fires Board as he is the representative of the Bush Fires Board in our area. He gave me permission to read it here. This letter is dated the 19th May, 1961, and is addressed to Mr. Sutherland. It is from Fred A. Wedge, Chairman of the Gingin Bush Fire Control Officers. It reads as follows:--

> With a Royal Commission holding an inquiry into bush fires that have caused great damage this season his findings and recommendations are looked forward to with interest especially land holders and fire control officers.

Much ground will be covered in the report and am wondering whether it would be permissible to request that a State problem could have the Commissioner's consideration. I feel that an amendment to the Bush Fires Act is necessary to give some protection and consideration to the person burning off. Quoting the Act No. 55 of 1937 page 7, paragraph 3--

> "Nothing in this section shall be deemed to relieve any person from liability for any actionable damages sustained by any person in consequence of any burning operations carried out in compliance with all the conditions prescribed in section 1 of this Act."
>
> Admittedly an insurance policy would be helpful but who knows the amount? With the local case in question all burning off precautions under the Act were complied with and neighbours agreed they were satisfactory prior to burning off. The day following the burn unexpected freak weather with excessive heat and powerful wind burnt neighbours' properties. The adjoining neighbours had not complied with the Act re breaks and precautions.
>
> Compensation was claimed legally. Person burning off was advised by Queen's Counsel, Victoria, and his local legal adviser that he had practically no chance of successfully defending the case, court costs would be very high and to meet the position out of court.
>
> There could be many cases where the present Act could be most unjust, particularly in cases bordering on an act of God and demands consideration. Also it is not everyone that is strong enough to allow the case to go to the court and have damage assessed fairly under these conditions. Those making legal claim can, it appears, make a claim exceeding the value of the damage done. Clearing must go on. May this subject receive your earnest consideration? Details of the local case in question could be made available.

Is there anything else you would like to bring before the commission?---You mentioned bushfire brigades. We have a bushfire brigade set up in Gingin, and we think it is helpful. Originally, however, we ran into trouble inasmuch as the Bushfires brigade could go to an area with all the equipment and the men, and when they got to the area the fire control officer should take charge over a captain of a brigade. That could work satisfactorily in many instances but not in all. It would depend on the captain of the bushfire officers. We overcame that by appointing our captains as bushfire officers. It was a problem at first because there were two

or three instances where bushfire officers would not have been capable of taking over a brigade. Perhaps you would say they should not have been bushfire officers, but it is a voluntary organisation and we had to accept what was available. It would have been impossible for a brigade to function satisfactorily under them.

I appreciate that. When you say it is a voluntary organisation and you have to accept what is available, I take it the councils do not accept a man because he volunteers; that they make every endeavour to get the best man as fire control officer; accordingly your fire captain would be one of the best men and would be a fire control officer?---We had our fire control officers before we had the brigades.

What happens in your road board when a man reaches an age which affects his agility and usefulness in firefighting, and he is appointed a fire control officers?---That is what I was thinking of.

I have seen an instance of it, and I think the road boards must take a strong stand?---It is very difficult, and the replacement is not easy. If a satisfactory replacement were obvious it would be easy to decide.

Firefighting is war; one cannot be thin-skinned or squeamish if one is to get the best results?---That is so.

Did you have any experience of the Chittering fire?---I attended it.

Do you know where it originated from?---No. I only attended it when the call went out for volunteers, when it was approaching the Chittering Valley.

It did not start in your road board district?---No, I would not know much about it.

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BY MR. HALE: You mentioned that an adjoining neighbour had not complied with the Act. Did your local authority take any action to prosecute any of those neighbours?---No. They had complied with the Act so far as the boundaries were concerned. This is where the roads board leaves off. When you make an inspection at a neighbour's place and find the boundary breaks satisfactory, the situation is considered to be all right.

In what way had they not complied with the Act?---There were not breaks around the buildings or houses, and the internal breaks were non-existent, but the boundary breaks were satisfactory.

Had internal breaks been ordered by the local authority?---No. I thought the Act prescribed that buildings had to be protected if there was a local by-law.

The Act states that the local authority shall order the enforcement of fire breaks but the position of such breaks, their width and everything else are left to the local authority. When you said the neighbours had not complied with the Act I took it that the local authority stipulated breaks. There is nothing in the Act, unless there is a local authority by-law enforcing them to put breaks around their buildings?---I thought that was covered by the Act, but I have since found that it is not. I thought I remembered reading that it was an essential part of the precautions, because in fires which occurred elsewhere so much manpower had been used for the protection of buildings that there was insufficient manpower to concentrate on the fire fronts. This will certainly be a by-law which we will be incorporating. This instance has taught us a lot, and next year buildings will have to be protected and covered by a by-law.

It should be included in your fire break order, stipulating that buildings, haystacks and whatever you want included, should be protected by internal breaks as you consider necessary to adequately protect the properties?---One does not become familiar with such things until an emergency crops up. I was also under the

impression that large properties had to be broken up by breaks.

That might be included in your district?---That is another by-law about which I have heard, and which seems to be important.

BY THE COMMISSIONER: You have said that next year you will be considering the enforcement of precautions, but the danger does not exist only next year, but in 10 or 20 years' time?---These matters will be considered at the road board level when by-laws are proposed.

Does your local authority insist on prosecutions under the Act for breaches of the Act?---Yes. We had several last year.

(The witness retired).

Sitting suspended for lunch.

ALFRED WOOD, displaced Mine-worker,
now a Forest worker, Box 48, Collie,
Sworn and Examined:

BY THE COMMISSIONER: You say on the top of your evidence you are a retrenched mine-worker. Is that the same thing as a displaced mine-worker?---Yes.

You have prepared a statement of evidence for the information of the Commission. Would you read it, please?---Yes. My statement is as follows:-

I, Alfred Wood, of North Collie, a retrenched mine-worker, wish to give evidence summarising the activities of 50 miners sent from Collie on Friday, 3rd March, at 3 p.m. to assist in controlling the Karridale fire.

I understand Mr. Lonnie directed directed the dispatch of this relief and the 50 men left Collie in 5 units of 10 men, each equipped with trucks, fire-fighting equipment (rakes, water drums, pack sprays, axes, cross-cut saws, first aid kits, emergency rations etc.) and two cut meals supplied by ourselves.

I have had considerable experience in the past fire fighting in forest country and have had 30 years practical experience in the forest.

All men who went to Karridale had been members of gangs engaged in firefighting in the Collie area, participating in at least 6 fires. I myself and a gang spent four days at the Dwellingup fire and I consider that all miners who went to Karridale had greater practical experience than the average volunteer at the fire.

From Collie the relieving party proceeded direct to the Margaret River Road Board for instructions. On arrival at Margaret River we contacted the secretary of the local road board who directed us to McDonald's garage at Karridale, arriving there at 6.30 p.m. At Karridale the gangs were split up by Constable Sparks; three gangs were sent to actually attack the fire and two gangs to patrol properties endangered by advancing or receding fire.

Our activities in this regard did not cease until proximately 6 p.m. on Saturday night, after working 33 hours continually without rest.

All men were recalled from their fire-fighting duties for a forced rest at Kudardup Hall and all workers arrived at the hall between 6 and 7 p.m. We were advised to be ready at 6 a.m. on Sunday morning to continue fighting fires, but were not dispatched until about 9.30 a.m. This meant that valuable fire fighting hours were lost. All these gangs ceased fire fighting in the Karridale area Sunday night. Subsequently two relief gangs were sent to Karridale area, leaving Collie at 7 a.m. Monday morning, 6th March, returning to Collie at 1 a.m. on the 7th March, after working 18 hours without rest.

The activities of these various gangs are not known fully, but there are some highlights which should be brought to the notice of the Commission:-

1. No maps were supplied, or were available, indicating the position of the fires, roads, water points or control centre.

2. General organisation was lacking -

   (a) overseers in nearly all cases had to decide the method of attack and try to deduce what he was attacking;

   (b) because of the lack of organisation valuable time was lost;

   (c) two fallers from Collie, at the request of the police force, travelled in a private utility to the Karridale area; this was in response to a call for chain-saw fallers. These fallers saw four individuals who were thought to have some control, and were given no direction where their services were required. These fallers offered their services in the area between Margaret River and Karridale to no avail, and eventually returned to Collie without doing any work or assisting in any way. The two men travelled 260 miles in answer to a call for urgent assistance and were not used;

   (d) heavy earth-moving equipment was available in the district but did not appear to be frequently used;

   (e) one further problem I encountered was the objection of Mr. T. Rose to the cutting of his wire fence to get my truck through to get to the fire. I issued an ultimatum that my gang and myself would return to Collie if I could not cut the fence. We argued for a short time and he directed me not to cut the fence. I ignored his instruction, in the interests of the farmers in the area, cut the fence and went through with my truck, men and equipment. If I had not cut this fence at this point I would have had to travel 8 miles by an alternate route to get to the fire. Mr. Rose jumped in his tractor and drove off. Before I left to come home to Collie Mr. Rose apologised for our encounter, indicating to me that my action in the fence incident was correct.

3. <u>EQUIPMENT.</u>

   At times our equipment did not measure up to the task, but appeared better and more comprehensive than what I saw anywhere else. We were equipped with chain saws and were frequently used on road clearing rather than actual fire-fighting.

4. Lighting of Fires:

There appeared to be indiscriminate lighting of fires. As an example a group of youths were told by an overseer not to light a swamp in which there was a track that two gangs would use as an escape road. The lighting of this swamp could have caused the gangs to scatter and also would extend the fire. A further example was the lighting of a windrow of logs and scrub behind a fire line which was being constructed across the path of the fire. The lighter of the windrow, who is not known by name, was questioned as to his reasons for lighting it when he saw that a fire line was being constructed between the windrow and the oncoming fire. It would appear that the lighter was not aware of the seriousness of his action for he replied, "It's O.K."

The oncoming fire caught up with the windrow and jumped into a neighbouring property. This may not have happened had the windrow not been lit.

5. In the "West Australian" newspaper of Thursday, May 18th, it was reported that, and I quote --

> "Collie Miners sent to fight fires near Kudardup had instead turned the Kudardup Hall into a wild Beer Party."

I was at the Kudardup Hall from 7 p.m. Saturday until about 9 a.m. Sunday morning with 80 other men. This hall was set aside for our mess and sleeping. On Saturday the 4th March two very well-known and respected citizens of the district were married. The groom who was affected by the fire and who was deeply appreciative of the untiring work that the Collie miners had performed at his property, invited several of the miners to attend his wedding reception. Unfortunately the miners left Collie hurriedly and did not take their dress suits with them and as a consequence were unable to accept the invitation to attend. As a compromise the groom sent the remains of the 10-gallon keg of beer, which was about five gallons in quantity, to the Kudardup Hall where 50 miners and others partook of a well-earned glass of liquid refreshment. This was the first alcoholic drink available to the men since leaving Collie.

Quite a good deal has been said about the miners' conduct at the Kudardup Hall. The Kudardup Hall was used as our mess and also provided our sleeping accommodation.

I never left the Hall from 7 p.m. Saturday night until 9 a.m. Sunday morning and the accusations made against the miners, according to what I witnessed, are incorrect and misleading. I admit in my previous remarks that the miners did have a drink from part of the keg left over from the wedding, but I never saw any bottles of beer in the area.

The miners' conduct at the hall was nothing unusual. After having a clean-up and a wash, some of the miners, due to their tiredness, retired to bed whilst others occupied their time discussing the position of the area, and some men assisted the women in the kitchen before they bedded down. The hall was not turned into a wild beer party as has been stated by a previous witness.

I would end my submission by thanking the women and persons responsible for the handling of the eating and sleeping accommodation. The women worked tirelessly and must be complimented for the manner in which they treated us.

The miners left the Kudardup areas with many new friends and nearly all the miners have been invited back with their families to spend a week-end at the homes of the people they assisted during the disaster. Most of the people affected by the fire voiced their appreciation of the service the miners had given them, and letters of thanks have appeared in the local Press.

BY THE COMMISSIONER: You say that you understand Mr. Lonnie directed the dispatch of the relief?---Yes.

Who supplied the fire-fighting equipment and the trucks?---The Forests Department.

You really went there as representatives of the Forests Department?---Yes. I was working there at the time. I am an overseer for the Forests Department.

Did you act as volunteers?---We were directed by Mr. Lonnie. They rang up the Collie people and we were out in the bush. That is why we did not leave until 3 o'clock. We started work at 8 o'clock and had to go back home to tell our wives because we did not know when we would come back. It might have been three or four days. They also asked us to take two cut meals with us because they did not know when we would be fed.

Who went out to the bush to get you?---The Forestry storeman.

You say you have had considerable experience in the past in fire fighting in forest country and that you have had 30 years' practical experience in the forests?---Yes. I was a timber cutter for the mines but I was still classed as a mine worker. I have been cutting mine timber, I have been a sub-contractor for five years, and have worked for five years for Douglas Jones, and have spent nearly all the time in the bush.

If you are a mine worker it does not necessarily mean you work down in the bush?---No, you could be anywhere.

You say that after your first night fighting at Margaret River you were taken to the Kudardup Hall and asked to be ready at 6 o'clock the next morning but that actually you were not dispatched until about 9.30 a.m. Were the men ready at 6 o'clock?---Yes, before 6 o'clock.

Do you know the cause of the delay?---No one could give us any directions. There was no organisation. No one knew anything. In fact we all thought we were going home.

Who came at 9.30 to tell you?---I could not tell you.

It was a civilian?---Yes.

And when you got to Karridale you were met by Constable Sparks?---Yes.

And he told the different gangs where to go?---Yes. I think he did a very good job. He had too much to do, but he did a very good job.

When you got to the place you were directed to, were you left on your own to work or was someone put in charge of you?---No, we were left on our own. They knew I was an overseer and had had a lot of practical experience.

But you did not know the district?---No. That is why I said that we were lacking maps. Everyone knows how to read a map and if we had had maps we would have been all right. That night I was sent to Deep Dene and I did not know where it was. I did not have a map and we left at 12 o'clock and it took us two hours to find the place which was valuable time lost.

Were you supposed to be constructing fire breaks or fighting the fire?---Fighting receding fires.

How? With water?---We had pack sprays and rakes and our saws. We put the trees out with water.

How did you know where to start? You would have to start from some safe position like a road or something?---Yes. When we got there the Karridale fire was finished and we were sent to three farms from the Kudardup hall and told to look after them that night.

You were really carrying out mopping-up operations?---Yes, more or less mopping-up operations.

And a certain amount of road clearing?---Yes.

Did you come into contact with any of the local fire controllers at all? Did they announce themselves to you as fire controllers?---No, no-one announced themselves to me.

You say there were two relief gangs sent to Karridale?---Yes; they sent us home on the Sunday so they could send a relief gang down on the Monday.

None of the same men went back again?---No, none of the same men at all.

Do you have groups in the Collie district with this information?---When we go to a fire in the Collie district we have a senior fire control officer with us and they show us the maps, the waterholes, and where we are to fight the fires.

Have you adequate members?---Yes.

This country was largely outside forest country?---Yes.

There would not be maps for that particular purpose, probably?---No.

These two fallers who went to Collie at the request of the Police Force -- that was the Collie Police Force?---Yes.

In what way did they receive the request?---I think it came over the air, for chain fallers to respond. Only two could get down.

On what days did they go down?---They went on Saturday. I was going to the same place as they were, and when we got there, there were no trees. They didn't think they could be of much use so they came back home.

You were sent there from where?---We were sent there from Karridale.

Who sent you?---I don't know whether it was Mr. McDonald, or who it was.

Would he have been a fire control officer?---I don't know whether he would or not. I took my instructions from Constable Sparks.

What did you do after that? You went along with these men?---They got us to cut some trees along the main road. I think we could have been doing better work than that. We only gave them a hand because we had chain saws; but you could get around easily enough.

The two men who went along -- they felt their services were not required?---Yes. They went voluntarily. It looked like there was no work there for them, and they said they thought they would have to go back home.

When you say there was heavy earth-moving equipment available in the district but they did not appear to be frequently used, would you explain that?---I had seen bulldozers there, but I think they belonged to private contractors; only, I think the drivers had had a fair innings and I don't think they could have been using them.

What was Mr. Rose's reason for refusing you permission to cut fencing?---He said the stock would get out. I said that if the stock got out it would not worry me as long as I could save lives.

He apologised afterwards?---Before he left the hall he shook hands and said he was sorry we had had the encounter, and I understood that was more or less an apology.

It was not because he thought you were going in the wrong direction?---No; we were sent from Kudardup Hall to go around the back of the fire. We were sent into somebody's property. From there we could see the fire. If we did not cut a fence we would have had to go back to Kudardup and right around and go through the farms.

This indiscriminate lighting: You say there appeared to be indiscriminate lighting of fires, and you

quote an example. The youths did not light it, I take it?---I have two witnesses in Collie who can come out and tell you about that.

You do not know whether they lit it or not?---They did not light it while they were there. We could see the fires -- it must have been lit somewhere.

Have you any information as to whether those fires were lit for the pleasure of lighting them, or because they were doing useful work?---Not for useful work -- we were fighting the fire, and they were somewhere behind us. Of course, you always get people who don't know where we are.

This windrow that caught alight -- what time was that?---That would be just before dinnertime. We had a bulldozer there and we put a windbreak right through, and we were burning back of that to try to stop the fire coming on. I did not see this happen, but a witness did. He was there at this time and he told a fellow that he should hold his fire until he could see if he could stop the fire on that line; if not, then he could light the windrow.

About midnight on the Saturday?---Yes.

Do you know whereabouts that was -- that windrow?---No; I could not say offhand; I was not too familiar with the place at all.

You know where the Busselton highway runs?---Yes; when you go to Kudardup Hall you have to go about eight miles from there.

Eight miles which way?---Going north from Kudardup Hall.

Towards Margaret River?---Yes.

Was it on the right-hand side of the road or the left-hand side?---The right-hand side of the road.

Did the man actually have the wedding -- on the Saturday?---Yes; he went on with the wedding after all.

I do not think anybody raised an objection to anybody having a drink, in the circumstances ?---No.

Can you say that you saw no offensive behaviour of any sort there?---Yes.

And you had no complaints from anybody?---No complaints from anybody.

I think that is about all you can tell us. We have already had evidence from the Police Commissioner. Is there anything else you wish to say?--I think that is about all I want to say.

THE COMMISSIONER: Thank you, Mr. Wood.

(The witness retired).

ARCHIBALD CHARLES DUNN, Deputy
Chairman, Cockburn Road Board,
217 Hurst Street, South Coogee,
sworn and examined:

BY THE COMMISSIONER: You have some evidence you wish to present, that you think will be of assistance to us?---Yes.

Will you proceed with it?---Yes. My primary object in giving evidence is entirely from the point of view of the local authorities, and in particular my own ward which is the most southern ward of our area. In the past we have had numerous outbreaks of fire from that direction -- chiefly the south-easterly direction -- during the summer. I have lived there now for 14 years, I suppose, altogether, and summer after summer fires start from this one direction. Some have been serious and some have not, but the board has been greatly concerned regarding fires. The area was sparsely settled with settlers here and there, and some years the fires coming through did not greatly concern the majority of the people as the settlers were able to make their own breaks. But in later years, as settlers have come along, working in factories and so on, fires are a serious menace. The board, in its wisdom, sent a circular to all ratepayers. It is rather an elaborate affair and you could not help but see it when it came through the post. It is printed on the board notepaper, and I will read it --

Bush Fires Act, 1954
(Section 33)

Fire Breaks

You are hereby notified that a fire break sufficient in width to control an outbreak of fire must be prepared on the boundaries of your property prior to the 15th day of December, 1958.

Failure to do so may result in such work being carried out by this Authority at your expense.

This is one of the back numbers that was in the office -- the others have all gone out -- and that is why it refers

to 1958. Also this matter was advertised in "The West Australian" on the 7th November, 1960, and in the "Government Gazette" on the 11th November, 1960. The response to this was fairly satisfactory. Quite a number of settlers took our advice and cleared their blocks, but regretfully, on the other hand, numbers did not. I shall quote from my own area before I go further. In paragraph 3 of my statement I mention that fire-outbreak was in a sparsely settled area. In paragraph 4 I have this to say --

> Large areas of land held in the district by the State Housing, State Government and Commonwealth Government do not have firebreaks as the responsible Governments refused to construct because of the cost involved.

We have very large tracts of land throughout our district owned by both Governments; and where we get co-operation from the ratepayers in general -- they do their bit -- we have these other large tracts of land which are just left and where nothing happens. In very hot weather it needs only a spark from a passing motorist, and away they go. This last year, along the road opposite my own dwelling, there is land owned by both the State and Commonwealth Governments, and the State Government land in particular, goes through from the Rockingham-road to the coast. A fire started there in the hot months at the end of January, I think -- I cannot quote the exact date -- and it was the largest and fiercest fire I have seen in the area since I have been there. It was to the extent a ground fire and brown fire.

BY THE COMMISSIONER: What month did you say it was in?---In January -- towards the end of January. That fire cleaned the area right through. You can still see the results of it. No one knows how it started; but that is a very large tract of land owned by these departments, and nothing was done. It was very dangerous too, to the extent that debris and lighted sparks were going everywhere; you could not see across the Rockingham-road. Traffic was held up and parked on the side of the road because the smoke was so dense.

It was a very dangerous fire. With the circulars and other efforts we are making we are dealing with that sort of thing.

Who owns that land?---The land I am speaking of is owned by the State Government, and the Commonwealth has a small portion of it.

Is it held as a reserve for any particular purpose?---Yes, it is held as a reserve. Part of it is a prison reserve. That is where they anticipate building a prison at sometime or another. The Commonwealth area -- I can be corrected on this -- I think is owned by the Defence Department. There is a large area of it also that is owned by the State Government where the new freeway is going through, but it is not a dangerous part because it has been bulldozed. It is the old land that is the trouble. Because of this, we are loath, really, to prosecute any offenders under the Act, because right alongside of them they have large areas of land where nothing is done; and it is really a danger. I would like to pass some comment on the excellent co-operation we have received from the Cockburn Cement Company. They own over 800 acres of land. The blocks they own -- it is not a square block of land -- are in the hills. The blocks are in and out and scattered around, and it is a very dangerous and difficult area to control. But on our approach to them, they bulldozed a 14 ft. strip right around the whole 800 acres, which, to my way of thinking, was quite a big job because the country they went through was stony, hilly, and very difficult. Some of it was heavily timbered and on some of it there was scrub. I have some figures which I got from the company this morning in anticipation of coming here. They told me it took them three days the first time they went around their area with a bulldozer to do a 14 ft. strip. This last year it took them 1½ days to go around these 800 acres, which was quite easy. The area they had 'dozed was most effective. The fires are held up each time; they have stopped at that strip. In certain areas they have burnt, but

on the whole the 14 ft. strip which the company put through has been most effective. From the board's point of view -- and I speak wholeheartedly for the road board -- they most appreciate the efforts of the company in co-operating with the board. It just goes to point out what can be done if the effort is made. A large tract of unoccupied land need not be a source of trouble if it is handled in the right way, which it can be. In regard to the last big fire we had in the southern portion of my ward, where there was quite a considerable amount of damage done, I was unfortunately in Perth and was not present until it was all over, and all I can give you is hearsay evidence. Our board employees went out with the equipment -- all that was available. The secretary was out there, and they did their best to control the fire, but it had got in such a huge way that it eventually burnt itself out.

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?---Our equipment consists of a 2,000 gallon tank capacity, a 1,000 gallon tank and two, 500 gallon tanks. We also have water points at four corners of the area which makes it easy to pick up water in an emergency, especially when we have a fleet of three trucks which we use. We also have a portable pump which is on a trailer and they can put it to any well or water catchment to get water. Speaking for the board, I think it has done all it possibly can. I will emphasise again that we are up against the problem of land with which people will not do anything.

Do you have fire control officers in your road board area?---We are all fire control officers.

All the road board members are fire control officers?---We are all supposed to act as fire control wardens, but I have never had reason to do so because I am always out of the district and I am only home at night.

Do you not think it would be better to have a fire control officer who is continually resident in the district?---As far as I know the fire control officers from the metropolitan area come through. Part of our area comes under the Fire Brigades Board.

Yes, possibly it does; I do not know your area at all?---The southern area, in which I am resident, does not, but the northern area, which we call Hamilton Hill does and we pay our fire brigade fees. As the housing progresses the fire brigade takes over and the water supply is there.

I am going to take a quick run through there tomorrow morning and see what it is like. But that is the position; all your members are fire control officers?---We are fire wardens.

The Bush Fires Act makes provision for the appointment of fire control officers by the local authority and the wardens are appointed by the Bush Fires Board?---Yes.

When you say that these people have refused to construct fire breaks, who has refused in regard to the Commonwealth land?---By medium of letters.

Yes, but which department or person have you approached?---The State Housing Commission was one that has been contacted. However, in regard to whom the letters have been written I cannot answer that question. Correspondence is all filed in the road board office.

I was about to say that if I contacted the road board secretary he would probably be able to tell me?---Yes, the correspondence has spread over several years.

Do you know whether the road board has ever tried to prosecute the Commonwealth for not fulfilling its instructions?---I think it has, but I think you know that the road board cannot prosecute the Queen.

I do not know whether the Commonwealth is the Queen, but I did think you could prosecute. When you sent notices out to these people to prepare fire breaks sufficient in width to control an outbreak of fire, that seems to be a very indefinite request to a person if it has to stand up when the person concerned is under a threat of prosecution. A man might put in a fire break a foot wide and, in certain circumstances, it may stop a fire, but, in other circumstances, a fire break 12ft. wide and may not stop a fire?---That instruction is issued to people on housing blocks.

You have never issued a prosecution yet?---Not to date, but there is one pending. The people concerned were picked up by the officer coming through from the Fire Brigades Board. They were on the Rockingham Road. As to how far the case has progressed, I have no knowledge. Those people were picked up for lighting fires out of season.

Would you know whether your board or any officer of the board has approached the Commonwealth with a plan for fire protection in the district and asking the Commonwealth to co-operate? I should have thought that they would have found it difficult to refuse to co-operate if there were a general plan in existence?---I cannot answer that; I have no knowledge of that.

You must have inspectors going around so that they may know to which places they should send these fire notices and whether or not they are being complied with?---They are under supervision by the road foremen who make these inspections.

As far as the Crown lands are concerned, has any suggestion ever been made to private owners that they should put a fire break into those lands for their own sakes?---I do not follow you.

I take it that the Crown lands are surrounded by land held by private owners?---The last block fronting my own abuts on to Russell Road and there are a few market gardeners on that boundary, but on the Rockingham Road there is not and on the Hope Valley Road there is not, but on the front there are the cottages which are leased from the Lands Department on a five year lease. That is all solid, hard rock and there is no fire danger there.

They have a road on two sides so there would not be any fire danger there?---No, on part of one side the whole of the coast road runs from Russell Road to Naval Base Road and that is all Commonwealth and State land. The Naval Base Hotel is on the corner of Naval Base Road. From Naval Base Road through to Russell Road is, as I have said, all Commonwealth and State owned land. There is a hotel, a store and some shacks. They are all covered, then half way up Russell Road, there is another blank space until you come to the market gardeners. I suppose about a quarter of the area if occupied by the Commonwealth.

As far as you know none of the primate land-owners put a fire break into the Commonwealth land themselves?---Yes, they invariably put a fire through their boundary and do so before the season comes along. They use a tractor to put the break right through round their own properties and their neighbours' properties, too, knowing the trouble they have from this particular land.

The reason why I was asking you whether you had made any approach in regard to Commonwealth land was that I was thinking the approach should be made to the Department of the Interior in the first instance. The

Department has a representative here in Perth?---I do not know who was written to or who was approached.

BY MR. HALE: Would you say that the largest part of your road district is rural land, or otherwise?---Yes, at the present time the largest part would be rural land. We have the red strip area, or the market garden area which is reserved under the Town Planning Act as a rural area. That area will remain as a rural area.

Have the fire wardens that you mention certificates of registration as fire control officers?---No, they have not.

So, in actual fact, they are not fire control officers?---Yes, they could be abused.

Was the fire, which you mentioned as going right through your area, reported to the Bush Fires Board?---You are referring to the one in January?

Yes?---No, not to my knowledge.

Who would issue permits to burn in your road district?---The secretary.

Is he a Fire Control Officer?---He has been a Fire Control Officer in the bush for many years before coming down here. He is quite competent as regards fires. It is one of the things he is very keen about.

You mentioned a prosecution that was pending. Prior to that were your board's officers' recommendations taken in prosecutions?---No. We have only issued warnings, as I have already said.

Is the firebreak notice issued by your board fully enforced by inspectors and follow-up warnings if necessary?---Yes.

What percentage of compliance with the order would you get?---Over 50 per cent.

But no action is taken against the remaining 50 per cent?---Only by way of warnings.

(The witness retired.)

THE COMMISSION ADJOURNED.

MONDAY, the 29th May, 1961

RICHARD LANCELOT LEWIS,
Farmer; Balgarup, Kojonup,
Sworn and examined:

BY THE COMMISSIONER: Would you please give the Commission your full name and address?---Richard Lancelot Lewis, of Balgarup, Kojonup.

And your occupation?---Farmer.

Where about is the land in which you have an interest in the district?---Which I own?

Yes?---Nine miles south of Kojonup, on the Perth-Albany Highway.

You have prepared a statement of evidence for the Commission; would you read it, please?---Yes. I have rather a long preamble. Do you want me to read that.

Yes; under oath it has to be read out?---My statement reads as follows:---

In giving information on Bushfire Control and organisation in the Kojonup Road District I think it is advisable to deal with the subject under the following headings:-- (a) Prevention; (b) Action on Outbreak of Fire; (c) Control and Extinguishment of Fire; and (d) Administration.

Prevention

The Kojonup District has 12 bushfire brigades. Each brigade appoints its own fire control officer (subject to nomination by Road Board to Bush Fires Board), captain, lieutenants, and secretary. Subject to approval of road board the brigade appoints a "person authorised to issue clover burning permit." Each brigade has a meeting of its members to decide on order in which controlled fires are to be lit during the burning season. The road board is supplied with a list. Brigade members with their equipment assist the landowner in putting through a fire. The road board is notified by the landowner or occupier.

Equipment: All equipment is privately owned. There are nearly 300 power units in the road district.

As far as I know, there are 287 to be exact.

The road board does not own any equipment, and does not subsidise brigades but has made grants to the Kojonup Bushfire Control Association for purchase of radio transceiver sets. Private ownership of equipment has a marked advantage over board ownership as equipment is maintained properly, especially during the summer months. Private ownership has also ensured adequate quantity of equipment. It is easy to visualise the deterioration were the board to supply equipment. Adequate and suitable power equipment is essential for the control and extinguishment of fires. Mobility is important. When trucks and utilities are not required for cartage of hay, grain, etc. equipment and water tanks are placed on trucks in case of emergency. By being so prepared fire fighters have often left for scene of fire within a few minutes. Units must be of a type capable of pumping water from dams and creeks.

It is considered that approximately 80 per cent. of fires started in the Kojonup district have spread from fires lit for the clearing of land. 15 per cent. have been caused by tractors, trucks, machinery and cars, and 5 per cent. from miscellaneous causes, in which I include cigarettes, children, etc.

As practically none of the clearing fires escaped on the day they were lit (if they do they are rapidly brought under control) it is obvious that the width of confirming breaks is too narrow, and that there is insufficient patrolling on following days by sufficient trucks.

Kojonup Bushfire Control Association considers that a break of minimum width of two chains on eastern, southern and western sides of all areas to be cleared by burning is essential.

Where bush country adjoins it should be burnt the previous Spring for a width of five chains or more.

It is impossible to lay down any regulations regarding patrolling after a fire has been put through as this is dependent on many varying factors, and must be left to the fire control officers and the owner or occupier of the land being burnt to determine.

Action in Outbreak of Fire

Immediately upon an outbreak of fire the fire control officer of the area (or in his absence a lieutenant) is informed. All farmers, and their wives and workmen know who is the fire control officer or lieutenant. The fire control officer orders trucks within his brigade area to attend the fire, the number depending upon the hazard. The secretary of the road board is informed as soon as possible by the fire control officer or competent person, such as a lieutenant, and advised whether trucks are required from another brigade area, and whether it is necessary for any other brigade to stand by to await the order from road board secretary to proceed to fire. Note that trucks from other brigade areas do not proceed to fire unless by direction of their fire control officer. The procedure is for the fire control officer at fire to

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request more trucks. This request is made to secretary of board, who in turn requests fire control officer of another brigade or brigades to send trucks. The secretary of the road board informs chief fire control officer of the district, and awaits instructions re use of transceiver sets. The chief fire control officer has his own transceiver set, and he may or may not proceed to the scene of fire. The secretary's job is to remain at the office to receive and transmit telephone calls. The board has a second 'phone number so as to obviate delays in making and receiving calls. The board's office is the nerve centre and the fire control officer at a fire, or a responsible person acting on instructions from the officer, sends in frequent reports on progress being made to extinguish the fire. Should more trucks be required from, say, one or two brigades, the sectary 'phones only the fire control officer of the brigade, whose duty is then to order the required number of trucks from persons he knows are already standing by. Instructions may be issued to them to proceed to a certain flank of the fire or to an exact spot. This is dependent on instructions from fire control officer at fire to the secretary, who in turn relays the information to the fire control officer of brigade being called upon to assist.

The object is to have at the board's office a composite and up-to-minute picture of the fire and action taken to extinguish it. The aim also at outbreak of fire is to get the required number of trucks to the scene in the quickest possible time. On a bad day every minute counts. With over 300,000 acres of pastures in the district the need to deploy sufficient men and equipment in the shortest possible time can be understood.

Control and Extinguishment

The fire control officer of the brigade area in which the fire is takes charge. If he is absent a lieutenant is in charge. Trucks arriving are sent to the flank considered necessary by the fire control officer. At some fires it may be necessary to fight it on say the eastern and western flanks if fire is travelling in southerly direction and narrow the front continually until the front can be stopped, the front being the apex of a wedge. The fire control officer arranges for the patrolling of perimeter while the fire is being brought under control. It may be necessary to use a truck or two to replenish water supplies to trucks in actual use of suppressing the outbreak. After extinguishment it may be necessary to patrol for several days.

As soon as fire is extinguished or no further help is required the fire control officer informs the road board office, and the secretary 'phones other fire control officers to tell them to stand down their men. From outbreak to extinguishment the secretary (or his assistant) does not leave the 'phone unattended.

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FACTORS WHICH AID IN CONTROLLING FIRES THAT HAVE GOT AWAY:

Firebreaks: Firebreaks will never stop a fire on their own, but can be of great assistance as an aid in burning back. They should be of sufficient width and away from standing timber, if possible.

It is considered that the local authority should appoint an inspector to examine all fire breaks in its district, and immediate action should be taken against all persons whose breaks do not comply with requirements. It is impossible for the fire warden to inspect adequately all breaks in his area.

It is suggested that eventually all properties should have a 20 or 30ft. break on their northern and eastern boundaries. This would be of considerable help in controlling any fire which has got away, irrespective of wind direction, and should not be too great a burden on any farmer to maintain.

Burning of Bush Timber: Fire which enters timber country is the most difficult to control, particularly unstocked country which has not been burnt for several years. This country is our greatest hazard as it allows the fire to spread and it is difficult and dangerous to try to control it in the bush, and on a bad day it is sometimes impossible to bring it under control in dirty country.

It should be made compulsory that all unstocked bush country, including reserves, should be burnt whenever it will carry a fire in the autumn or spring or at least every third year. If this were done no fire should ever reach major proportions in the Kojonup area.

Roadsides also should be regularly burnt, and as they gradually get cleared of rubbish they can be burnt later each year and thus give a very good break.

The importance of preventing fires has been instilled into the minds of the town and rural residents of the district. Over the years the people of the district have become bush fire conscious. Town residents are encouraged to burn or clear the precincts of their farmlands and from farmlands to the town unless there are adequate and efficient breaks and organisation. Members of the Kojonup Bush Fire Brigade assist town residents in burning grass every year. All services are entirely voluntary.

The road board, as the statutory authority, issues to each owner and occupier of rural land an order to have fire breaks. A copy of the order is attached.

Efficient breaks are essential and insisted upon, and breaks are inspected before a permit to burn is issued by the fire control officer.

ADMINISTRATION:

Although the road board is the statutory authority fire control and organisation has been left to the Kojonup Bush Control Association, which is a voluntary body consisting of two representatives of the road board and two representatives from each of the 12 brigades. This Association has been

functioning for 20 years. A copy of the rules of the association is attached. At meetings, however, everyone is invited to attend and take part in the discussion, and to illustrate the interest that is displayed in the Kojonup district I might mention that from 80 to 100 persons attend a convened meeting of the association. It is customary at the end of each fire season for the advisory committee of the association to hold a "post mortem" and recommend to the association improvements or other course of action.

An advisory committee has been appointed to advise the association on fire matters. A copy of the rules is enclosed.

Local brigades deal with the association and not with the road board. Individual farmers must discuss their requests with their own brigade. Every farmer may obtain a free copy of the Bush Fires Act and Fire Law Summary; most farmers possess a copy of each.

During the summer the Board's secretary obtains fire hazard reports on radio at 6.35 a.m. or 7.00 a.m., and if the season has already opened he may 'phone the Weather Bureau for a special forecast for the district (and the Weather Bureau is usually right!!) and the fire weather officer is informed.

On high hazard days the fire control officer 'phones the secretary of the board for special forecast and to inquire if a ban on lighting or on harvesting and carting is imposed.

That is the fire control officer of the brigade, not the chief fire control officer. To continue -

A fire weather officer (Chairman of the Association) and a deputy have been appointed. They are empowered to prohibit use of farm machinery (tractors, trucks, harvesters, etc.) on days considered hazardous. They confer by 'phone or transceiver, and usually confer with some of the fire control officers. As soon as a decision is made the secretary of the board is informed, and he in turn informs by 'phone all fire control officers. On days when the fire hazard is "Dangerous" or likely to be "Dangerous" it is the responsibility of individual farmers to find out from their fire control officer whether or not there is a ban on lighting of fire, or on harvesting or carting. Farmers here, however, are so educated in fire control matters that many refrain from harvesting or carting when a ban has not been imposed. After 4 p.m. each local fire control officer has the right to act independently as regards continuing with the ban or lifting it for his brigade area. The fire weather officers are also empowered to ban lighting of fires.

On days when fire hazards are high the womenfolk make little use of the 'phone so as to leave the lines free for bush fire calls. In summer calls are made in the early part of the day with this object.

The whole organisation is one of co-operation, and is entirely voluntary. No one is paid for any of the services rendered. Success has been achieved through this voluntary movement and through the

zeal shown by the farmers of the district in not only preventing fires but also in extinguishing them before damage is done. That there are nearly 300 power units in the district is sufficient illustration that they take fire control and organisation seriously.

RECOMMENDATIONS:

1. That when there is an efficient organisation, such as in the Kojonup district, local control should be encouraged; but only when there is an efficient organisation.

In a district like Kojonup farmers from long residence and experience are qualified to assess the local fire hazard. In Kojonup the fire weather warden and his deputy, in consultation with fire control officers take into consideration advice and forecasts of Weather Bureau obtained by telephone and/or by radio announcement.

2. Although provision is made under Section 53 of the Bush Fires Act for rebate of 25% on insurance premiums in approved districts it is considered that where the Bush Fires Board is satisfied that a standard such as achieved by the Kojonup district the Act should be amended to provide for a 50% rebate on insurance premiums.

3. That financial assistant should not be given by the Government in cases where the person suffering loss has not taken out insurance.

4. That a fire control officer or person appointed in writing by the local authority be empowered to enter land to inquire into origin of a fire.

5. That the police be not empowered to take an active part in controlling and extinguishing a fire and inquiring into its origin unless requested by the local authority.

6. That any alteration to the Bush Fires Act should not be only minor as regulations should be such as to allow everyone to comply with them. If made too severe or complex people will be encouraged or inclined to break the Act.

7. The opening of the burning season should not coincide with the opening of the school term.

8. That there is need for one overall authority on bushfires in the State, and that authority should be the Bush Fires Board.

9. Due to the very high price of transceivers Government assistance towards purchase of these units would be desirable. Rapid communication during a fire is essential. With the change of small telephone exchanges from manual operation to the automatic system the use of transceiver sets has become essential as small automatic exchanges permit only one call at a time.

Miscellaneous.

1. It is the considered opinion of the people of the Kojonup Road District and of the Road Board that Road Board members, as such, have enough work and responsibility as the local governing authority and can ill afford the time to organise the district in fire prevention and control. The Kojonup Bushfire Control Association was formed in 1937, and in the succeeding years has achieved a very high degree of efficiency in preventing and controlling bushfires.
2. There are 8 mobile transceiver sets in the district owned by the Association or Brigades and one which I have purchased for my use as Chief Fire Control Officer. The Road Board contributed £100 towards the purchase of the Association's sets. At times the transceiver sets have not worked satisfactorily, but I am hopeful of improvement.

   It is felt that a base station situated in Kojonup is essential to obtain the full benefit of the transceiver sets. This base station cannot be installed until Kojonup is on alternating current.
3. To enable a better appreciation to be made of bushfire control in the Kojonup district I attached some statistics embodied in the annual report to ratepayers by the Road Board.
4. Attached to the report I have sent to the Commission are the following:-
   (a) Order by Road Board to owners and occupiers to provide firebreaks.
   (b) Statistics of the Kojonup Road District.
   (c) Rules of the Kojonup Bushfire Control Assoc'n.
   (d) Rules of the Advisory Committee of the Kojonup Bushfire Association.

BY THE COMMISSIONER: That is a very useful report, perhaps as useful as anything the Commission has received up to date and you must have gone to a lot of pains to get it down in such detail. The efficiency of an organisation, of course, depends not altogether on planning but also on the results it gets. Have you any figures which would tell me what percentage of the country in the Kojonup Road Board was burnt over last year?---Yes. We did attach a copy of this to the report we sent to you. The total acres of pasture burnt was 1,440 and 7,320 areas of bush. There were no stock losses but we lost 7 tons of hay. We valued the pasture at £2 an acre, even though it was burnt in March -- the 1st of March was our bad day -- because normally that is what I consider it would be worth. We did get an early break which relieved the situation considerably, and I think that would be a fairly average figure -- £2 an acre. We have 660,000 acres in Kojonup and there are 244,323 acres uncleared -- all the rest is cleared -- which gives us approximately 420,000 acres cleared.

I am afraid we did not receive a copy of that information which you have just read out about the number of fires?---It should have been sent with a covering letter. If it has not arrived I will send you a copy of it, or I can leave this one with you. (Handed to the Commissioner.)

I understand you are the chairman of the Bushfire Control Association?---Yes.

Have you had any experience outside the Kojonup district in bushfire work?---Very little, but on odd occasions at Mayanup, Cranbrook or Katanning. I started in South Australia but I was only a kid then.

I was wondering where your background had come from. Are you a member of the road board as well?---No.

There is not much I can add to the information already given, but there are a few questions I would like to ask you to clear my mind in regard to a few points. Do you know how these brigades in your road board district originated? Were they volunteer brigades in the first place, or did the road board itself arrange for their creation and establishment?---No, they were completely voluntary, and their boundaries were largely governed by telephone exchanges. We are trying to keep them on the local telephone exchange as much as possible, for ease of working. We did find some of them to be too big and we have split them up and have now increased the number to twelve. We started off with nine.

You say that you have twelve brigades and yet you have nearly 300 power units. Can you tell me how many brigade officers you have in the way of captains and lieutenants?---There is a bush fire control officer and a captain to each brigade. Some brigades have one and some up to four lieutenants.

What would the total membership of the brigades in the road board district be?---Approximately 220. I could not tell you the exact number.

So you have more power units than men?---We have more power units than farmers and several big farmers have more than one unit. I have only a small one but I have three; one is always left at home in case one breaks down and then I can always call on another one. Several have big power units of 7 or 8 horsepower with a big high pressure pump, and they may have an auxiliary as well. Those are all included.

Is your district a comparatively wealthy one as far as the farming community is concerned in view of the fact that you have so many power units?---Not according to the bank managers down there.

Is it a wheat-farming district?---No, sheep, grazing and oats.

Your captains of brigades are fire control officers in every case, I take it?---Not in every case. Sometimes they have two appointments so that you have your second in command automatically following on.

What do you mean by "your second in command automatically following on"?---The fire control officer is in charge and then if he is away the captain takes over rather than the lieutenant; but it is left entirely to the local brigades to determine for themselves how they want to do it.

You say that the road board has made grants to the Kojonup Bushfire Control Association for the purchase of radio transceiver sets. Do you have a special frequency of your own for the operation of these sets?---Yes, 2,270.

Then you cannot use them for communication with neighbouring districts?---From Kojonup eastward we are on the same frequency, but on our western boundary we have to change to another frequency. Our sets on the western boundary have the two frequencies; they have put in the extra crystal so that they can communicate with Boyup Brook.

The bush on your western side is jarrah bush?---Yes, mainly jarrah - jarrah, redgum and wandoo.

Do you have any difficulty in maintaining these radio transceiver sets?---Yes.

Due to the inefficiency or inexperience of the personnel?---I do not know the answer to that one. We have a radio technician in Kojonup who is doing a good bit of work. We have sent all the sets to Perth and they have come back and have not been any better. We are still not happy with the general set-up. We think that

with a base station with more power it would overcome the problem because, like the taxis, you could speak to your base, but not to each other. At the present moment, on some occasions, we put in a mobile station half way to relay messages. Two years ago they worked to perfection up to 40 miles. The radio technician told me that if we had a better frequency such as they have in the Eastern States it would overcome nine-tenths of our problems. That matter, unfortunately, is one for the P.M.G. and although Mr. Sutherland has tried to help us they will not give us an alteration.

Have you any idea of the cost of those transceivers?---We have seven Westerns costing £130 each which we bought direct from the manufacturer, and one Pye, which cost £187.

You say that when your trucks and utilities are not required for the cartage of hay, etc., the equipment and water tanks are placed on the trucks in case of an emergency. What do you do? Do you keep them suspended and lower them onto the trucks when required?---There are several of those -- some have their tanks empty and fill them from an overhead tank through a 3" stock cock, and some of them are on rails so that the truck can be backed in to lift them up. We have one unit with a 450-gallon capacity tank and everything on it and it is fully loaded to go in any emergency. We can load that and be away in under two minutes.

How do you load it?---It is on rails and it has wheels and as the truck is run in so we pull the supporting bars out. Of course, that method is not universal; everybody sort of adopts his own method.

You say that practically none of the clearing fires escaped on the day they were lit. Is that your general experience or was that your experience only during the past season?---This year we only had one clearing fire escape when it was lit, and to the best of my knowledge that is the only fire that has escaped on the day it was lit over a period of 10 years.

You say that the Kojonup Bush Fire Control Association considers that a break of a minimum width of two chains on the eastern, southern and western sides of all areas to be cleared by burning is essential?---Yes, that is correct; of all areas to be cleared by burning.

That means that if the next-door neighbour does the same you will have a total width of four chains for the break on the western side, but only two chains on the southern side?---If you have two people both going to burn adjoining paddocks, that would be so, but that does not happen often and, if it does, we often put the both through as one fire.

I see. You say that the cessation of patrolling must be left to the fire control officers and the owner or occupier of the land being burnt to determine. That is a matter of discussion between them, is it?---The fire control officer can give orders to patrol, but the owner or occupier might have excellent breaks all around his land and he may not have bulldozed into heaps the scrub and because it is spread over, therefore, it might be all right. However, it would depend on the conditions. For example, if it were hot and windy it would have to be patrolled.

I was wondering whether the fire control officer always inspects and gives orders for the patrolling to cease, or whether it is left to the landowner to make the decision, because from the evidence I have received from some districts it is seldom that the fire control officer is brought in to make a decision on that?---On a bad day for fires, the fire control officer always gives the decision. Anyway, I hope he does. Sometimes a landowner does not think it is necessary and the fire control officer makes sure that he is there and orders the trucks himself. However, if it is not bad weather the decision is left to the owner or occupier. However, we are getting more insistent on the matter of patrolling afterwards.

The Act actually provides that he shall patrol until the fire control officer gives him permission to cease patrolling?---In our district that has been taken to mean that that is applying to the fire itself. They might keep the trucks there until midnight, or until 4 or 5 in the morning, and once the general harsh fire flame dies down they go back, and the next day the fire control officer rings up and states that they must have the trucks there. However, if the weather is calm and there is not much danger and the owner or occupier has good breaks there is not much danger and he leaves the decision to the individual.

You have brought in the term, "Chief Fire Control Officer" appearing on page 2. Who is your chief fire control officer? Is it, as it is in many cases, the Secretary of the Road Board, or is it somebody appointed by the fire brigade?---He is appointed by the brigades. They appointed me as chief fire control officer.

Does that follow because you are Chairman of the Association"---Yes. I have been Chairman of the Association for five years and we have only had the one chief fire control officer for three years. I am also the weather officer.

Going back to where you state that you thought they should leave two chains on the eastern, southern and western sides of all areas to be cleared by burning, what do you visualise as a firebreak?---A firebreak is any cleared land of inflammable material.

Where it is raked or ploughed?---Yes.

And where the bush country adjoins you consider it should be burnt the previous Spring for a width of five chains or more?---If it is standing bush country we consider the minimum width should be five chains. Some of the breaks for certain land are burnt for a width of 10 chains.

What influences you in making the width two chains?--In trying to be as reasonable as possible and without making the break excessive and yet trying to get the maximum safety factor to prevent jumping. Two chains will not stop a fire jumping. I will give you an example of that. On the 11th March, two years ago, we had bad winds and we had 11 fires that got away from burning. They all got away approximately at midday and, on every occasion, they had been put through with an easterly wind, and with breaks only 12 ft. wide on the southern side the wind swung round and every fire got away. Then we brought in the minimum width of two chains for the firebreak on the southern side and last year we had no trouble. Then this year we had easterly winds again but none got away on the southern side although the wind swung around to the north and then west. As we know the wind can swing round to the west and it is pretty unanimous now that we should have a break of a minimum of two chains on the southern, western and eastern sides. We still get an odd fire getting away, but if we did not we would not need all our equipment.

A similar reason influences you in choosing five chains for the bush country?--Yes. It is very hard to get a really clean burn in bush country, so if it jumps into five chains it is easily extinguished.

You say it should be made compulsory for all unstocked bush country, including reserves, to be burnt whenever it will carry a fire in the autumn or spring, or at least every third year. Are you satisfied that you can get a satisfactory burn in that bush country?--Not a clean burn, but a patched burn which would be as good.

You do not think it would be better to wait five years?--No, because the fourth year could be a dangerous hazard. If it is patched through we can hold anything. We had an occasion when bush had not been burned for 20 years, and it was impossible to deal with it.

You say that roadsides should be regularly burned. Do you practise that?--We do, but not enough. We burn the Albany Highway out and a few of the arterial roads. We are trying to get the landowners to co-operate, but it is not easy because they are afraid of their fencing, particularly those with rabbit netting. But we are gradually getting more and more farmers to do it.

After you said that in some of the road boards the secretary obtains a fire hazard report and informs the fire weather officer, you say that "on high hazard days the fire control officer 'phones the secretary" … You mean the fire control officer of each brigade?--Yes, but it is not the chief fire control officer.

I thought it might have been the weather officer?--No.

You say that the fire weather officer and a deputy have been appointed and that they are empowered to prohibit the use of farm machinery -- tractors, trucks, harvesters, etc., -- on days considered hazardous. Have you ever done that?--Yes.

Do you make any distinction between machinery which you know is fitted with adequate spark arresters, as against any other type of farm machinery?--All mobile tractors should by law be fitted with arresters. Others have mufflers. I do not know which is more dangerous. If we put a ban on harvesters we put a ban on the lot. It must be a very high hazard for us to do it.

I was interested in the fact that on days of fire hazard the womenfolk make little use of the 'phone. You seem to have them well trained?--Yes.

In your recommendations you say that when there is an efficient organisation, such as in the Kojonup district, local control should be encouraged. Do you mean brigades?--I mean the whole of the Kojonup area, where we can make our own decisions when the prohibited burning period is lifted, and we are doing controlled burning, rather than rely on Perth to say there is a ban on lighting fires. We feel we are perfectly efficient and have a sufficient knowledge in our own district to know whether it is safe or not. We do take great notice of our weather forecasts, not for that particular day so much but for the weather that is to come up. That is important.

I appreciate your point, but I am concerned as to whether every farmer does not think he is capable of interpreting a fire hazard?--Everyone does, but if you have three or four to confer, the decision is usually very good.

You say --

> Although provision is made under section 53 of the Bush Fires Act for rebate of 25 per cent. on insurance premiums in approved districts it is considered that where the Bush Fires Board is satisfied that a standard such as achieved by the Kojonup district the Act should be amended to provide for a 50 per cent. rebate on insurance premiums.

Have you ever discussed that with the insurance people?--Yes, but they knocked us back.

Did you ever discuss the possibility of premiums being charged on results. As far as I know, basically insurance premiums are based on results. If you have a lot of accidents in the timber industry, the premiums go

up; otherwise they go down. Can a similar system be applied to bush fires?--We pointed out in the last letter that we had had a claim for stock losses but since the war, and that 168 sheep had been burnt in the district. There were no cattle losses and we considered on those results they should drop the premium on stock. But they said they must take in the Bush Fire Board's recommendation where approved areas came under one fixed heading. We consider with the money we have spent on equipment -- which runs into a few thousands -- we are saving the insurance companies having to pay out, and we feel that we have got to the stage where they should give us a considerably greater reduction.

If I were an insurance company I would not be so impressed with the fact that you had so much equipment, as I would with the results obtained with that equipment. I thought the same system might apply in this case as does to motorcars?--At the present moment they are grouping all the approved areas as one.

You say that financial assistance should not be given by the Government in cases where the person suffering loss has not taken out insurance. Is not that harsh? It sounds a bit harsh if a person, due to an oversight or a shortage of money, did not take out insurance, was to be denied any relief at all?--We have never had any Government assistance at Kojonup so far for people who have been burnt out in the district. The district has always looked after the farmers who have been burnt out. We were thinking on the possibility of farm houses or sheds being burnt and where a man has made no effort to cover himself, knowing that the district will cover him in the event of anything happening. The brigade brought this matter up themselves. They wanted it to be understood that if a man did not look after himself in a small way he should not expect any assistance at all. It sounds harsh, and I suppose it is harsh, but I daresay it has to be harsh to get any results.

You recommend that the Police should not be empowered to take any active part in controlling and extinguishing a fire. What do you mean by that?--The actual physical act of controlling -- purely that.

You also say they should not be allowed to inquire into its origin. I think it is the practice of the police, when they think a crime has been committed, to begin their investigations as soon as possible?--

?---I was not referring to arson, a crime in which the police would be interested. I was thinking of fires getting out of control. If there was any criminal intent we would ask the local authority to call in the police. Where local fires get out of control, either through the fault of the owner or otherwise, we would sooner have the investigations carried out by our advisory committee, rather than the police or the coroner.

Why do you say that?--Because we could learn. We would be far more human in our findings. We have recommended quite a number of prosecutions, and the defendant in each case has been found guilty. Sometimes when a fire gets away the owner may still be responsible but we may not think it necessary to prosecute if we feel he has taken sufficient precautions. Once a fire has got away, if the police were to make the investigations they would prosecute the person responsible.

Is it not a fact that some local authorities do not carry out as many prosecutions as your road board?--I can only speak about Kojonup. I want to elaborate on recommendation No. 4. Our advisory committee has been inquiring into the origin of fires. Suddenly we found we were not empowered to enter private land, except when the fire was burning. We are not allowed to go on to private land a week after the fire to investigate. That was the legal opinion our road board received. The Bush Fires Board has also made inquiries into this aspect and it has received the same opinion. I think it is very essential that the advisory committee or someone appointed for that purpose should be authorised to go on to private land to make inquiries.

Are you suggesting the local fire control people, rather than the Bush Fires Board?--Yes. We could make inquiries immediately. The Bush Fires Board has only one warden to cover a very large area. We might have six fires which got away and we would like the investigations to be made as soon as possible.

R.L. LEWIS,

Why were not bush fire control officers authorised to go on to private property to inquire into the origin of fires?--I think it was an oversight in the Act. We had been using this power until we found we were wrong.

You did not find that out as a result of an objection raised?--We found that out through a member of the road board.

Not through going on to his property?--No.

You suggest that any alterations to the Bush Fires Act should be minor. You would include the alteration of the width of the firebreaks in the minor alterations?--The two-chain width which we are using in Kojonup does not necessarily apply to the wheatbelt.

Would you include that as a minor alteration?--At present it is 10 ft. wide and we are recommending two chains.

I am not thinking in terms of two chains, but possibly increasing it to 12 or 15 ft.?--I would include that as a minor alteration. The main reason for recommending this is to retain local control. As the Act stands, it is very good and will be improved with very small minor alterations such as giving authority to the fire control officer to inquire into the origin of fires.

You are only looking at it from the Kojonup Road Board point of view?--Yes. I cannot speak for anybody else.

Why do you say the opening of the burning season should not coincide with the opening of the school term?--That only happened this year when the school year coincided with the opening of the season. I suppose 30 per cent. of the farmers in Kojonup would bring their children to Perth to school, on the Monday or Tuesday. The fire season opens also on the Monday. Usually the best equipped farmers are absent from the district on this occasion and that increases the fire hazard unnecessarily. Next year for Kojonup we will not be opening the fire season until the Wednesday, so that those two dates will not coincide.

R.L. LEWIS,

This is a difficult matter to regulate against?--Yes. I understand that next year the schools will be opening earlier because of the forthcoming Empire Games.

You speak of the need for one over-all authority for bush fire control, and that such authority should be the Bush Fires Board. Do you mean the over-all authority in its present form?--At present was have the Bush Fires Board, the Forests Department, and the local authorities. The Forests Department takes control on all forestry land and two miles beyond, from whence the Bush Fires Board takes over. Where forestry country is involved we have to notify the forestry officer, the warden, and other people. If the fire gets away the forestry officer takes charge of the forestry land, and two miles beyond. We think where the land is cleared surrounding the forestry land, the local authority should always conduct burning operations and back-burning, without control from the Forestry Department. I can understand the Forestry wanting to look after their own country, but at present it over-rides the Bush Fires Board.

That is not quite correct. So far as I can appreciate, all that the Forests Department can do is to prohibit the burning where a permit has already been issued by a fire control officer, if the forestry officer considers such burning to be dangerous to the forests, either due to the weather or similar circumstances. Then he can prohibit that burning within two miles of the State forests?--Difficulties arise as on one occasion about three years ago. The Forestry land comes into the south-west corner of our district. It contained dirty bush and we requested the Forests Department to burn patches of it. They sent their people out on the 23rd December to carry out burning operations. This is contrary to the Bush Fires Act and would have been an extreme hazard to our district. We

want to stop that sort of thing. That was the only occasion when we ran up against the Forests Department at Kojonup. If they had lit the fire, it could have been a very serious hazard.

They carry out quite an amount of burning within the prohibited season without incurring any losses. They are pretty experienced in bush fire control?--I agree.

One would have to think pretty carefully about suggestions to take these powers out of the hands of the Forests Department, because they would know what were the dangers within the forests?--

R.L. LEWIS,
29/5/61.

?---I was not suggesting their own country. That is in their hands.

Just this two mile stretch?---Yes; anywhere near cleared country. I think there they should take notice of the Bush Fires Act because the Act is designed to protect the farmer.

The Bush Fires Act does provide for them to be given power to burn during the prohibited season - the Minister can suspend the provisions of the Act as far as their burning is concerned?--Yes.

You think they should be under the same conditions as the ordinary farmer?--Yes.

I think somewhere you said you did not believe in the Government or the road board subsidising the brigades. I think you said the Government. You think the brigades are better maintained if the people are responsible themselves, but in your last recommendation you are suggesting the Government might consider subsidising the purchase of radio transmitters?--Previously I was talking about ordinary fire-fighting equipment, which everybody pretty well has. We have eight transceivers in our district and that is all we need within a base station in a district to cover the district adequately. They are expensive. They are roundabout £150 to £200 each; and that is a lot to ask the farmers. A base station with eight transceivers would cost nearly £2,000.

And it is more of a community service than an individual service?--Yes.

You get a somewhat similar case in certain local authority districts where they do not have anything like the power units you have as a matter of course?--Yes.

They do ask at times for Government assistance. Some councils are against it while others are for it. A lot of consideration has to come into it regarding the type of district concerned?--Our road board bought plant around about the time we started the bush fire brigades. It was kept in Kojonup and every time you went to get it it was either broken down or not there at all.

It was then that a man came over here from South Australia and said, "This is no good; everybody must have his own," and we started the way we kept going.

Do you know the name of the man from South Australia?-- It was Percy Thorne - Mr. P. P. Thorne.

He is not associated with bush fire control in South Australia is he?-- No, he came from South Australia and settled in Kojonup.

When you refer to the change in telephone exchanges is the difference between the manual line and the automatic line that the manual line may be on party lines?-- You could plug in three or four at the one time. If somebody were utilising the 'phone too much the manual operator could say "We want to use that line" and could then cut them off. With the automatic there is nothing you can do. The P.M.G. is playing ball extremely well on that now. On the automatic trunk to Kojonup every six minutes they say, "Six minutes". However, even on the new system you can have two women on the automatic. We all thought it was going to be marvellous when it came but it has its limitations.

You say a base station cannot be handled at Kojonup until Kojonup has alternating current. Who is responsible for that?-- The S.E.C. At the present time Kojonup manufactures its own d.c. current and interference makes it impossible.

I was wondering how you were going to arrange that. Is it a matter for the Kojonup Road Board?-- No, the S.E.C. will come through eventually. I mention that because further back I recommended that a base station would make sets better to operate. That is why we have no base station.

I notice one of the duties of your advisory committee is to carry out research work for the prevention and control of bush fires. Did they do any of that?-- We did quite a bit in the early stages with pumps and different nozzles, etc. We have not done much recently except trying to get better use out of these transceivers.

I would like to know how you manage to maintain the enthusiasm of the people in your district -- how you manage to keep up this excellent organisation. Perhaps you had an easy year or two or a few easy years?-- Last year was a very easy year and we did not call a meeting. However this year was the worst I have known. We held a combined meeting and 120 people turned up. Questions were coming from every side of the hall and everybody was not agreeing. That is the way I like a meeting to be. If everybody agrees it is no use holding the meeting. A lot of these people had been out at least a fortnight fighting fires and realised that something needed to be done.

I think that is the history of fire-fighting organisations throughout Australia. There is considerable difficulty in maintaining local district enthusiasm. It is difficult to keep prepared and have the plans drawn up which need to be drawn up each year, and so on. However, apparently you had people whose enthusiasm is not easily lost. It is just one of those things. It is the same as with the Army. If the men are not fighting they lose their morale. We try to overcome that by having demonstrations. We get all the units in to show their equipment and the ways they have improved their fire-fighting units on the trucks. We do not hold these too often. We have had a lecture this year on civil defence and first aid. On the whole there is a lot more clearing to be done -- 220,000 acres need to be cleared there.

I have seen a lot of these demonstrations and a few people certainly come along, but they get a bit monotonous. I think your organisation must have some special interest which brings them in. It is normally the road board?-- If the road board ran it we would not have anything. I am not being critical; I am being truthful.

Most of the farmers on the road board have more work than they can do at the present moment and can show no enthusiasm for a fire-fighting association.

They cannot be expected to show their first enthusiasm for fire-fighting?-- No.

(The witness retired).

THE COMMISSION ADJOURNED.

AT PINJARRA

TUESDAY, the 30th MAY, 1961.

THE COMMISSIONER: I shall read the terms of reference (reads terms of reference). It is proposed to sit from 10 a.m. to 12.30 p.m. and from 2 p.m. to 4 p.m. on Tuesday and Wednesday. It was intended to sit on Thursday, but that is now impracticable. If we have to come back after Thursday, it will probably be Thursday of next week. All evidence is taken under oath and it is emphasised that it is essential that any expressions of opinion or matters of hearsay should be clearly expressed as such and not as matters of fact.

If any further person, other than those listed to give evidence, desire to give evidence in Pinjarra, it is essential that he notify the secretary immediately, and as early as practicable deposit with the secretary five copies of the evidence he proposes to present.

Witnesses will be given all the consideration and assistance practicable to enable them to place their evidence before the Commission with as little inconvenience and embarrassment as possible. In return it is asked that they state their cases as concisely and with as little circumlocution as possible.

When a witness has concluded giving his prepared evidence the Commission will examine him to bring out any relevant evidence which the witness may have unwittingly omitted.

Much of the information required by the Commission has already been given as evidence in Perth. The evidence which is now about to be taken will be largely confirmatory, and failure by the Commission to ask

questions on any particular point should not be regarded as indicating lack of interest by the Commission; nor, it is desired to emphasise, should any question be regarded as indicating doubt with regard the reliability of witnesses.

The basic purpose of the questioning is to enable the Commissioner to satisfy himself that he has been as fully informed by a witness as possible.

Questions by any of the gentlemen accompanying the Commission are also directed solely to assist the Commissioner and answers should be directed to the Commissioner. If any witness finds himself in any difficulty, I will be prepared to see him privately and discuss the matter if he will make the necessary arrangements with the secretary.

No assistance to witnesses by other persons will be permitted while the witness is giving evidence, unless some very special grounds exist to justify it.

In the light of further evidence, some witnesses may have to be recalled and any person who desires to do so may be given the opportunity of replying to any evidence given by another witness, but such opportunity will normally be only given once and will be taken only when the giving of all the original evidence has been completed.

Witnesses are requested, when giving evidence, to speak slowly and distinctly. Their evidence will be recorded in shorthand and when typed will be made available to the witnesses for any necessary corrections.

WILLIAM POLLARD, Farmer,
North Dandalup, sworn and
examined:

BY THE COMMISSIONER: You have prepared your evidence. Will you proceed to read it?---Yes; my statement is as follows:--

> The cause of the bush fire which started on the night of January 19th last, about 12 miles east-north-east of North Dandalup, was I think lightning as there was a severe dry thunderstorm that night. The fire spread rapidly on Friday 20th and by late afternoon was of dangerous proportions.
>
> Mr. R. Greenup of North Dandalup, on behalf of farmers here who were becoming alarmed, rang the Forestry Department at Dwellingup at about 5 p.m. and he told me that they had informed him that the fire was 10 miles from North Dandalup and was under control and that we had no need to worry.

I knew by personal observations that the forest in that vicinity had not been burned for approximately 30 years and was in a filthy condition from fallen leaves and litter and with an east wind blowing there was a very real danger.

The eastern edges of the hills in the private properties in this district were also in a scrubby state, owing to the repeated refusals of Forestry officers to allow us to burn.

I think every farmer in this district desired to burn their hill country every second or third year to prevent a hazard building up, but the Forestry would not give permission until after the first rains and as most of this country has been top-dressed with super and sown to clover the seed had then germinated and we could not burn.

I have repeatedly told district Forestry officers that they were building up a very dangerous fire hazard and that some day it would go alight from lightning or some other cause and would be beyond their control and would burn us all out, but they would not listen or would not heed.

The last three winters have been very dry, with weeks or fine weather when they could have burnt the forest without danger but very little was done and nothing in the very dirty section east of North Dandalup.

There is a section of country between the farm lands and the jarrah forest, controlled by the Forestry but bearing little or no millable timber. This could have been burnt in the late autumn or early spring with no danger to farms or forest but the Forestry would not co-operate with the farmers in burning this. By midnight on Friday 2oth the fire was down in the vicinity of some orchard properties about three miles east of Dandalup and the local bush fire brigade turned out to save these places, which it succeeded in doing. The fire was then completely out of control and was raging down the river towards Dandalup.

I rang the police at Pinjarra also the Pinjarra Bush Fire Brigade at 2 a.m. on Saturday 21st and told them of the fire and impressed on them the danger of the situation and that their farms and town could be destroyed as there was nothing to prevent it burning right through the district.

Several fire-fighting units from Pinjarra and surrounding areas came to our help. By daylight the fire was down the north side of the river into my grass paddocks and was racing south-west over the hills on the south side of the river. I had mustered the cattle out of my hill paddock in the dark.

We attempted to hold the fire there with power and knapsack sprays but was unable to do anything for the fierce heat and was forced to retreat to the firebreaks around the cultivation at the foot of the hills and burn back from there. By 9 a.m. the fire was travelling south-west well past the side of Whittaker's old mill and getting close to Fairbridge Farm. The helpers who had come from Pinjarra received word to return to protect their own farms.

The North Dandalup brigade, with the help of others from surrounding districts burnt a break from Conjarrup Brook near Fairbridge Farm along the foothills past Dandalup to a road about a mile north of Keysbrook (14 miles long) and held the oncoming fire. Burning trees near the edge were either put out with power spray or cut down and breaks were manned and held until Thursday when some rain fell and most of the danger was past.

W. POLLARD,

Gff/Bly 30/5/61.

The break was still patrolled in sections and anything burning within about 300 yards of the edge was put out. There were no stock lost in this area and the only buildings burnt were a couple of old sheds on two deserted holdings in the vicinity of Whittaker's old mill. Much damage was done to fencing and a lot of pasture was burnt.

I would consider that the best and only measure to prevent another such outbreak is to burn the forest and all other bush country every second or third year and prevent the growth of such a hazard as the forestry created before. Such fires would do no damage at all to the young trees in the forest and most jarrah seeds only germinate after a fire. If seedling trees were as readily killed as that it would be easy for farmers to clear their land.

Forestry officers have always maintained to me that even these regular fires would damage the jarrah trees and yet it was given over the air the day after Dwellingup was burned that the Conservator of Forests had said that he did not think there would be much damage done to the forest as the jarrah is a hardy tree and can stand fire. (This is a rather sudden about-face.)

Road Board should, and I think the Murray Road Board does, see that good and sufficient breaks are ploughed and kept clean around every property where it is possible to make a break.

Along the top of the hills where it is impossible to plough, breaks should be burnt and could be and if the Forestry were compelled to burn their country whenever it would burn there would never be such a fire as this one was, again.

The Roads Board and bush fire brigades will see that private persons do not build up a dangerous fire hazard but they have no voice in the management of the forest. I was probably one of the heaviest losers from this fire and but for the good work of the local bush fire brigades and their helpers I could have lost my home and stock. I think that the organisation in this area was of the highest order.

The officer of the brigade frequently patrolled the face of the fire seeing that men and equipment were sent at once to whatever spot they were most needed. Mr. J.G. Money was in attendance at the telephone continuously for several days with cars ready to take messages or men to wherever they were required. I would also like to say a word for the women of the district who patrolled the break all day and all night bringing drinks and food to the tired fire-fighters who could not have carried on without. We received no assistance at all from the Forestry.

Many people came to assist at this fire and brought good plants and did good service but many who came perhaps with the best intentions, came without gear of any kind and no knowledge at all of fire-fighting. It would be no use having a State Fire Emergency Organisation unless it is equipped with good and workable fire-fighting gear and such gear may not be used for years and would most likely be out of order when required.

The Murray Road Board grader did a splendid job of making a break to burn back from along the foothills where there was no ploughed break. The widest of fire-breaks are useless to stop an on-coming fire with a strong wind behind it (as the disaster at Dwellingup proved). The firebreaks are only something to burn back from but the Forestry have other ideas. Forty years ago when the forest was burned whenever it would carry a fire we had no disastrous spreads and the jarrah trees were free from die-back and much healthier than they are today.

W. POLLARD,

If the Forestry officials would only discontinue their high-handed attitude and co-operate with the farmers and local bush fire brigades there would be very little need in this district for emergency organisation. If we had not burned back from the break to meet the out-of-control forest fire we would certainly have suffered the same fate as Dwellingup and other centres.

There was ample gear at Dwellingup and plenty of time (the fire did not reach there until late in the evening of Wednesday 25th). If the Forestry had graded a break around the village and burnt back in the night or late afternoon the town could have been saved, but they apparently preferred to wait until it arrived and then ran for their lives.

BY THE COMMISSIONER: You say in your statement that Mr. Greenup said he had been informed by the Forestry Department that the fire was ten miles from North Dandalup. Is it possible that the fire that eventually came to you was a jump-over from that fire?---Yes; I would say it was possible and that the same fire continued down. There were no other separate fires that I know of.

When did you first see the fire yourself?---About 11 a.m. on Friday the 20th I first noticed smoke up there. The thunderstorm was during the Thursday night. It probably was smouldering for a while.

You say that you knew by personal observations that the forest in that vicinity had not been burnt for approximately 30 years. What vicinity do you mean?---From where the fire started to North Dandalup. I have ridden through that country and the leaves and litter were over 2 ft. deep in some places. You could hardly ride a horse for rocks and things there.

Was that a condition at the 10-mile, or where the fire started?---Yes; only some area between our place and there had been burnt about four years ago. But further back, behind Sharp's orchard, it was in this condition for well over 20 years.

I can understand that there was some which had been unburnt for over 20 years. I was wondering if you could say what proportion was old and unburnt?---No, I could not; but there was a good quantity of it right from where it started to a long way south--west of Whittaker's old mill-- in that condition.

You refer to repeated requests to the forestry officers to allow you to burn. Was that your own personal experience?---Yes.

Can you tell me who the forest officers were to whom you applied, and who refused to give you permission?---I applied to the chief officer at Dwellingup. I think Mr. McCoy was the man who answered, but Mr. Jefferies was in charge. It must come from head office in Dwellingup, and I would not know which officer gave the instructions.

Was there one occasion or several?---Several. Every year I made application to burn my paddocks, and they would not give me permission until after the first rains.

You were wanting to burn in the autumn or spring?---After the bush fires opened, about April--never before April.

Did you make that application last year, in 1960?---No.

Did you make it the year before, 1959?---Yes.

Can you recall who it was that you approached on that occasion?---Mr. McCoy. He gave me permission to burn on a certain day that year, and when I was all prepared and had men together and was ready to start--he had previously asked me to notify him on the day I was burning--I rang him and he would not let me burn. He told me I had to see that it would not get into the forest, which was equivalent to preventing me from burning at all because there were no breaks and it would have gone out into the scrub.

You had no break around the area you were going to burn?---No, not on the east side. It was very rough country. You could not get through.

Was it not reasonable to have some protection against fire escaping on that side?---Yes. They have breaks further back and if they would co-operate with us there would not be any danger. But that country along the hills had been burnt about four years ago, I think.

Who gave you a permit for that burn?---Mr. McCoy.

He would not give you a permit; one of the local fire control officers would?---I could not tell you which fire control officer; I forget.

Do you know if he examined the area before he gave you the permit?---No, I could not say.

I am interested, because I am wondering what use permits are if the fire control officer does not know whether it is safe to burn. You say the forestry would not give permission until after the first rains. They have given you permission after the first rains?---Yes, but it was too late then.

Yes, I can see your point. That was not the reason given by Mr. McCoy?---No. He stopped me because he thought the condition was too dangerous, I think, but he had given me permission to burn on that day.

That was the same the previous year?---Yes.

Do you recall when that was?---No.

Do you recall who the person was who told you you could burn after the first rains?---Mr. McCoy. He was in charge there.

You say there is a section of country between the farmlands and the jarrah forest controlled by the forestry but bearing little or no millable timber. Is that part of the escarpment?---Yes.

You say that the forestry would not co-operate with the farmers in burning this country. Do you know what efforts were made by anybody to achieve that co-operation?---Only by my personal application to burn it. I had asked them to burn it. I do not know whether any organisation had made application to them.

They would co-operate with you after the first rains, but the difficulty there is that you would have burnt some of your clover seed. Is that right?---Yes.

You say "Such fires do no damage at all to the young trees in the forest and most jarrah seeds only germinate after a fire". Whether it is reasonable or not to ask the Forestry to burn this country is obviously a very moot point and one to which the Commission has to give a good deal of consideration. When you say that most jarrah seeds only germinate after a fire, do you say that from your own personal experience?---From personal knowledge of fires. I have been all my life in the bush. Almost any man who knows anything about it knows that hundreds of seedlings come up after a fire. With the jarrah forest in the position it was, with the depth of dry leaves, it was impossible for the seeds to come up through that; it was rotting and full of insects.

When you say "germinate", are you using the right word? After any fire the seeds simply come to life and the young leaves and roots push their way up. That seed is said to have germinated. Do you mean that the movement of life cannot take place in the seed unless you burn it; or do you mean that it does not survive because of the amount of rubbish it has to push its way through?---I would not be sure about it. I know that in country that has not been burned very few seedlings come up until a fire goes over it. It seems to me that a fire scorching the seeds makes them come up.

Do you think most men find it necessary to scorch the seed to get them to germinate?---Yes, to get good germination.

Have you tried it yourself?---No, I have not. But I know that with our country, which we cleared, the moment you put a fire through it you get thousands of seedlings come up.

When you say seedlings, you do mean seedlings and not shoots?---I mean seedlings, not suckers; and the fire will not kill them, unfortunately for us.

You say, "Forestry officers have always maintained to me that even these regular fires would damage the jarrah trees". Would that be Mr. McCoy again?---Yes; Mr. McCoy was one of them that I have spoken to. I

have always tried to bring it up to them to burn their forest at regular intervals, but they would not do it; they said it would kill the young trees.

I suppose you would say that if you put a fire through the forest -- even a light fire -- it would kill off some of your young seedlings; but even with a small fire there must be some heat generated?---Even in a small fire I think there would be very very few that would be killed. They might be held back a bit.

It would keep them back to a certain extent?---Oh yes. But it would be probably three or four years before a fire went through, and the growth would by then be a good size. A three-yearly fire would not kill them down to the ground.

You think you could burn this country every three or four years?---The majority of it. It would burn off the majority of dead leaves or the fall-off of big trees.

You say, "We received no assistance at all from the Forestry". Did you expect any?---No; I thought they would probably be busy on their own; but they did not come near us.

You say, "It would be no use having a State fire emergency organisation unless it is equipped with good and workable firefighting gear, and such gear may not be used for years and would most likely be out of order when required." Would not the State fire emergency organisation be of any use, so far as you are concerned, even if it was only there for the purpose of organising assistance from other centres, such as other road boards where there was no danger of fire -- and you might have a big fire -- or for the purpose of bringing the Army into play; or Army personnel to give assistance; or for providing medical assistance; or for the purpose of looking after people who are to be evacuated: Would not the State fire emergency organisation some value there?---Yes, considerable value. But I meant the gear. We had experience some years ago with the Murray

Road Board concerning firefighting gear. It was not used for years and when it was required it was out of order and it was useless -- it would not work. Unless they had somebody that was constantly looking after it to keep it in first-class order it would be of no use when it was wanted.

Who is speaking of getting any gear?---Only what I have read with the paper -- articles in the paper.

As far as you are concerned you do not decry the existence of a State fire emergency organisation; it is simply that if they were given a lot of equipment you do not think it would be satisfactory; you think it would be negligible?---Yes, with the equipment. The other would be all right -- I mean the help and the assistance given. If they got a lot of expensive equipment, unless they paid attention to it it would be of little use when it was required.

Have you given consideration to the fact that such an organisation would be devoted to fire emergencies? It would be in a very different position from road boards. The road board has many other responsibilities, other than fires, with which to occupy its time. We all appreciate that if such matters are left to road boards it might take second place, unless fires occur frequently. With a State fire emergency organisation it would require local men to be sufficiently keen to look after the equipment?---It would be possible, yes. I think that burning a forest, or preventing people from building up these hazards, is the thing to do -- prevention is much better than cure.

But you have to prepare yourself for the occasional disaster that might consider?---Yes; oh yes.

You can get fires in grass country?---Yes, I have seen fires there which were very bad.

You say, "The fire breaks are only something to burn back from, but the Forestry have other ideas." What ideas have the Forestry about fire breaks?---They will not let you burn back from them. It is no use having a fire

break when there is a fire coming right at it. A chain-wide break would not even be able to stop it; it is no better than an ant pad.

Do you know of anybody who has been stopped from burning back from a fire break?---No.

Do you know of anybody who has been stopped from burning back from a fire break ahead of an advancing fire?---Yes.

When?---About four or five years ago, up around Dandalup -- east of Dandalup. It came from near the Bunbury Road and raced through the hills. It was getting close to Marshall's mill and the local fire brigade went up there. Mr. Jeffries was the forestry officer there with a gang of men. He wanted us to put it out. You could not have got within chains of it because of the heat. The local fire officer would not agree to it; and against Jeffries' orders we lit this burn back, and as soon as it was lit he called his men away and left us.

Who was that?---Jeffries -- Laurie Jeffries.

He was the forestry officer?---Yes, he was in control here. We stopped the fire at the break and we saved the mill and the house.

You say that the Forestry have other ideas. From what you have said in evidence they did not believe in using a firebreak; but, generally speaking, they must have the idea that fire breaks are to be burned back from. Would you think they would be entirely opposed to using them at any time?---Whenever I have had anything to do with them down here on the scarp edge they would not burn back, but will only try to put the fire out -- just wait along the break and try and stop it at the break.

You say, "Forty years ago when the forest was burned whenever it would carry a fire, we had no disastrous spreads and the jarrah trees were free from die-back and much healthier than they are today". Have you seen a die-back in the forest?---Yes, quite a lot.

Is it occurring in any particular part of the forest?---Mostly on flats.

Would they have been burned off mostly on the flats, more than the surrounding country?---No, I do not think so.

I think that in the days when the original natives were here they would have been in the habit of burning the flats frequently for kangaroo food?---Yes; they would burn it to drive the wallabies and kangaroos out.

But you do not know if the Forestry Department has specialised in burning those flats?---No.

If the die-backs are more on those flats, it does not seem that the burning has had much to do with it?---The area of the forest I am acquainted with has burned fairly regularly; the area between the main break and the scarp has been burned and there is little or no die-back on that.

There are flats in this country near your part of the country?---Yes, there are some places, but very little.

Let me put it this way: You say that die-back is more prevalent on the flats?---Yes.

There is a piece of country east of your place on which there is not much die-back?---Yes.

Further on there is a lot of die-back, mainly on the flats again. Would there have been many flats in the country east of your part of the country has there are in the forests?---Yes, in proportion to the width of it.

I am still left in the air. You say that the jarrah trees were free from die-back in the days when you had frequent fires. In the other country there is still that defence -- without any extra burning there is still more die-backs on the flats. Further over, where they do not burn so frequently, they are still getting more die-backs on the flats than in other country; yet they both burn to the same extent?---Yes. It is on the flats. I have not seen die-back on the hilltops -- it seems to be on the level. But up on the hills where the scrub is sparse there does not seem to be the die-back.

You say there would be more burning on the flats than on the hills, because there is more stuff to burn down there?--Yes.

I wish you could tell me the cause of that die-back; I am not convinced yet?--I cannot convince the Forestry chaps, although I have tried often. I spoke to one Forestry officer and I wanted to bet him that he could not find any other piece of the forest as healthy as this piece of country of Sharp's that is burnt from time to time. If he could show me another piece as good as that, I would bet him; but he would not go on with it.

You maintain that burning keeps the ground healthy?--Well, a lot of the growth was dying; the blackboys and pine were just dying. A fire improves all those things. They sprout up. They bear flowers or fruit after a fire. When they have not been burned for years they become extinct. They have a lot of old trees there they could make use of.

I do not know that it means it improves the health of the forest, but it does get rid of the rubbish, perhaps. You say that if the Forestry officers would discontinue their high-handed attitude -- which, I presume you mean, is their failure to co-operate in burning off through the forest?--Yes; as, for example, the occasion when Jeffries called his gang away and left us to fight the fire.

And co-operate with local farmers and bush fire brigades. You say there would be little need in this district for an emergency organisation. I do not know what the figures are for your district. I have been impressed by the fact that figures for most districts, and the State generally, reveal that the main common cause of fires causing damage is fires which have escaped after burning off?--Yes, I should say it is.

Would you not say that this would apply to your district?--Yes; but in this district, down here in the grasslands, we do not get a fire of major proportions. We may have a fire but it is all over and done with in a few minutes. We all have breaks and roads. There are big areas between roads, and we rush immediately to any fire with our firefighting equipment and we have them out before very long. Before you get any emergency brigade here, the fire is over. I am only speaking from our district, around here, and not of the eastern district where there are bigger areas.

You say, "There was ample gear at Dwellingup and plenty of time -- the fire did not reach there until late in the evening of Wednesday the 25th. If the Forestry had graded a break around the village and burned back in the night or late afternoon, the town could have been saved; but they apparently preferred to wait until it arrived and then ran for their lives." Were you at Dwellingup at the time?--No.

This is not of your own personal knowledge?--No.

It is hearsay?--Yes. I was at Dwellingup a day or two after and I saw the damage it had done.

This is a very important statement in itself. The town of Dwellingup was largely destroyed, and this has a definite impact on that point. I would like to know from where you got your information?--Only from other men who were there.

Can you tell me anybody who gave you that information?--I can; but two of the men who gave me that information were Forestry officers and I would not like to bring their names into it.

I must find out whether or not this is the truth. If you got that from hearsay, you cannot guarantee that it was the truth?--No, I cannot.

You say they had ample gear there. What gear did they have?--All the usual firefighting gear they had

from the Forestry, and Murray Road Board gear.

You do not know what gear -- only that they had a lot?--Yes.

You say, "If the Forestry had graded a break around the village". My recollection of Dwellingup is that it was a mass of tracks all around that part of the district and I would not have thought that any grading would have been necessary. Would they have had much to gain in putting another grade around it?--I would not know whether they all joined up. I am not conversant with it.

They may have had to grade little pieces here and there to join them up. I should not have thought there would be difficulty in burning back from there. By the time they got there could they not have been pretty well exhausted and done?--I would not have evidence of that. It is only hearsay.

BY THE COMMISSIONER: You make a rather serious statement when you say they apparently preferred to wait until it arrived and then ran for their lives? That is a rather unfortunate remark to make about men who had had a very severe time. But you must have had some evidence to make you say that?--I think they all got out of it for their lives there -- fire-fighters and all -- when it came.

Do you think they did it wisely, or should they have stayed there?--No, I think they were wise to get out when it got there, but had they turned back before it got to these breaks they would have saved them. You cannot do much with a fire with a raging wind behind it.

BY MR. McARTHUR: In the early part of your evidence you say that you first saw the fire at 11 a.m. on Friday. Is that correct?--Yes; as near as I can remember. I would not be sure of a minute or so, but it was round about that time when I first noticed some smoke there.

Not a big smoke?--No; not when I first saw it.

It has been given in evidence that the fire that possibly came into your place did not start until 1.15 on the Friday?--No; I am sure it was earlier than that when I first saw a bit of smoke up there.

When you talk of litter 2 ft. deep, could you give any idea of the areas where you might have seen that?--Yes, right from the 8 or 9-mile peg from Dandalup east and south-west and further north to Deep Brook or Conjarrup Brook.

BY THE COMMISSIONER: Just to clear my mind, when you speak of debris 2 ft. thick, do you mean a continuous layer of bark and leaves 2 ft. thick, or herbage on the ground that is holding up some litter to that depth?--No; leaves and bark. It was not like that all over, but in places where the trees were thick; and especially the banksia trees. In places it was too thick to ride through on a horse; a horse could not see where he was stepping and might finish up on a rock.

BY MR. McARTHUR: What is the main reason why you desire to do the burning off on your scrub country? Is it just to clear up the logs, or to prepare a seed bed for the clover, or what?--One thing is to make the paddocks safer; and to get rid of the scrub. You cannot clear your paddocks without it.

Is there any reason why it could not be done in the spring in preference to the autumn?--I do not think so; so long as it would burn. But you have the grass feed, and it has cost a lot of money to top-dress that country and you have your clover growing up amongst your scrub, and you cannot plough it because it is too rough. If you allow it to go without being burnt, it will overwhelm your clover. But if you run a fire through it, it checks the scrub and the clover comes away, and after a while the stock clear the scrub out.

In other words, you desire to use fire rather than some mechanical form of clearing your property. I do not see what mechanical implement you could get to do it in that country. If you did plough it, it would wash away.

It would wash away after a burn, of course?--No; it is only when you disturb the root growth on the top. The ground is more or less held together with the roots of scrub and grasses. Once you tear that up the heavy rains wash it away and you would have soil erosion. But it is too rough to talk about that.

You say in the early part of your evidence that the Forestry Department have not done very much burning. Yet later you make the statement that they burn frequently along the escarpment. Would they be burning to prevent fires coming out from the forest, or moving in?--I do not think I made the statement that they burnt along the escarpment at all.

You did later in your evidence?--I think you have misunderstood me. I do not think it has been done by the Forestry, but by fires that have come in there through that escarpment from the farms.

BY THE COMMISSIONER: You do not intend to say it was burnt by the Forestry?--No. I have no recollection of the Forestry ever burning that piece of country. It gets burnt from the fires running through it

from the farmers when they burn their back country.

BY MR. McARTHUR: You have no recollection of the forestry burning along the escarpment in recent years?--None at all.

BY MR. OATES: I do not think you have cleared up the problem of your need to burn too well. I take it that with regard to your hilly country you do, as farmers normally term it in this State, sow on the burn?--Yes. We burn it and sow on the burnt ground.

You get a burn-through and top-dress it and seed it?--Yes; and in about two years time you have to burn it again because the scrub is getting to the stage that it is enveloping your clover plants.

This sowing on the burn is a technique that is not only used in your hilly country, but right throughout the South-West. There has probably been 1,000,000 acres or more sown in the South-West by that method?--Yes.

I take it your hilly country would be no different to other farms in the South-West; and if you are going to get it properly established and get rid of the scrub and regrowth, it is necessary for you to get a fire through it at fairly frequent intervals and plant pasture?--Yes. I like to do it every second year until it is cleaned out. But you can only do it when it is dry. If you wait for the first rains, the clover seed has germinated and is up, and you kill it all off.

That is a normal farming practice in the South-West. What you are doing in the hilly country is no different to what has been done elsewhere in the South-West?--No; it is the same elsewhere.

(The Witness retired)

BY THE COMMISSIONER: You were here in charge of the fire-fighting operations at the time Dwellingup was burnt?--Yes.

You have heard Mr. Pollard give a resume of hearsay evidence to the effect that there was ample gear at Dwellingup and plenty of time. The fire did not reach there until late in the evening of Wednesday, the 25th. If the forestry and graded a break around the village and burnt back in the night or late afternoon, the town could have been saved. Would you tell me what your ideas are about that since you were actually on the spot? I do not want hearsay evidence but what you know of your own knowledge?--It appears from the witness's evidence that backburning is the only means of controlling a fire. I could well imagine that with pasture country, and particularly along the scarp, backburning or counter firing is very effective, and does not have the associated risks that it does in forest country. But we cannot fall back to cleared land to back fire to hold forest fires, or we will have to cover a lot of country. Certainly at that stage we considered the possibility of back firing but felt there was nothing to be gained from it; and we could cause harm in helping the fire on its way. With the wind as it was, and the conditions at the time, we felt we would have great difficulty in holding it; and if it was to be effective at all we would have to get depth, and we did not have time to get the depth of burnt country we wanted, and we would only have assisted the fire in its spread. We elected to disperse our units around Dwellingup with the object of protecting lives and property.

Why should it be any more difficult to hold a fire against a back burn in a case like that as against grass country? Is it the sparks from the back burn that you are referring to?--Yes.

Why is it any different in the middle of a forest to a grass patch?--If you are burning grass, the usual thing in counter firing is that you put your break some distance into the grass so that you have no trees along the edge to light up, and the trees throw over any break you have constructed; and the amount of line you can hold safely on that back burn is limited and requires a lot of men in forest country. In grass country the risk is greatly reduced. The general practice when burning flat pasture is to move in two or three chains from the forest edge, because they realise that when the trees get alight it will toss over. In high forest, there is forest on all sides and you have no open patches where you can get in and back burn from.

That is the reason why you did not fire a back burn? You were not doing any good, and you might have increased the danger?--Yes.

Mr. Pollard said, when speaking of the people responsible, -- the forestry, I take it -- that they apparently preferred to wait until it arrived and then ran for their lives. He says that the men preferred to wait until it arrived. You apparently did prefer that. Why did you prefer that, and what was your purpose, and what happened as a result of the fire getting there?--On the day of the 24th January the fire, which at that stage had been held over the night of Monday on the southern sector, broke on many points with the strong north-westerly wind. If Mr. Pollard is referring to the recall of our men at about midday, or between midday and one o'clock on the Tuesday when they were called back to Dwellingup to reform, there was certainly a withdrawal made then. The matter of withdrawing at that time was to guard the safety of the men because the position was not clear. The fire was running wild in a number of sectors, and we were afraid they would be cut off and lose communication, and that they were being endangered beyond a reasonable risk. They were recalled to Dwellingup with the object of attacking the fire again that evening. At six o'clock it was proposed to move the men out. At about 5.30 it became clear, with the change in wind from north-west to north and slightly east of

north that Dwellingup and Holyoake were going to be burnt if the fire came to them and passed them. We felt we would not be able to contain it because of the strong winds and the way it was moving. So we arranged for the evacuation of Holyoake to Dwellingup because we felt there was too great a risk to protect people and their property there. We arranged with the local postmistress to ring all farmers and advise them as clearly as possible of the position, and advise them that we felt that in Dwellingup they would be safe and would be protected, but not necessarily if they stayed on their properties. We then deployed our units, including quite a lot of equipment, to defend the township. Mainly the heavy units were dispersed on the northern boundary or the flank where the fire would hit the town and the light units on the east; and we had men patrolling within the town with knapsacks. The intensity of the fire that eventually swept the town was certainly greater than we anticipated, and certainly the loss was much higher than was anticipated, but we felt at the time that that plan was the best and most desirable one. There was certainly no panic. I feel the men acted particularly well; and I feel it is rather a damaging statement to make to say that they ran for their lives. I was told by people following the fire ---

BY THE COMMISSIONER: That is hearsay again?--I am sorry. I certainly did not see any sign of men running for their lives in any way. I felt they acted commendably.

Did you hear of any cases of men running for their lives?--I heard of two instances of men who elected to try and get out of Dwellingup; but they were the only two I heard of out of about 200 who were there.

THE COMMISSIONER: I stress that that is hearsay evidence that Mr. Pollard has given, but in the circumstances, the Press being here, this can be flashed in the papers undesirably and be untrue; and I think Mr. Beggs has probably amplified that evidence to the extent that we have a much better appreciation of the situation.

(The Witness retired).

DONALD WHEATON THORN, Farmer,
North Dandalup; sworn and examined:

BY THE COMMISSIONER: Are you a landholder in the district?--I am.

Where is your land, roughly speaking? Is it south of north of North Dandalup?--It is two miles north and west of the main road -- a road close to and adjoining the main road. I also have land further west. The first mentioned is the homestead.

You have prepared evidence for the Commission. Will you proceed to read it?--Yes; it is as follows:--

I am Captain of the North Dandalup Bush Fire Brigade.

The fire was first noticed by me on Friday afternoon 20th January, 1961, at about 4 p.m., when I estimated it was eight or ten miles east of my area and approaching steadily on a light easterly breeze.

By 8 p.m. the wind had strengthened considerably and the fire began to assume major proportions.

By 9 p.m. it was evident that the fire was advancing at a terrific speed and would before long be menacing the settlers in the hills on the eastern boundary of my section, so I telephoned Olivers to try and get more information on the exact position of the fire. Mr. Oliver was not at home, but his daughter who had just returned from Mandurah said the fire still appeared to be a reasonable distance away and one of the boys had just gone to investigate.

D.W. THORN
30/5/61.

I then rang Mr. Marshall who was the only other person on the phone in the area. He informed me that he had been in touch with the Forestry Department and had been told that the fire was about 10 miles back in forest area and could not reach his area, but he was not happy with the appearance of things, and was himself going to investigate the position and promised to let me know if the fire looked like crossing the forestry buffer strip and menacing privately-owned property.

At about 9.30 p.m. a call was received from Olivers to say that the fire was less than half a mile from Sharp's orchard and burning furiously.

The brigade was immediately called out.

I endeavoured to ring the Forestry Department to inform them of the position and see if they could be of any assistance. Owing to delay on the line I could not get in touch with them and had to leave my wife to contact them as soon as possible. When she did eventually contact them, the reply was to the effect that the fire was still within forest area and the settlers should go to bed and mind their own business.

On arriving at Sharps the brigade found the fire had burned to within about half a mile of their east boundary, where it had run into the more recently burned buffer strip, and had slowed down to a very moderate rate of progress. However, on the south side the fire had roared past within quarter mile, and was rapidly approaching Marshall's orchard, and saw mill (Lots 96/104/105).

The main force of the brigade was transferred to this area. Although the main fire had not reached this point, flying sparks had started a fire by the road, just east of Marshalls, and an attempt was made to hold the fire at this road. This proved useless as another fire soon started up nearly half a mile ahead on the other side of the property in the settlers' timber reserve. All that could be done was to make buildings, etc. as safe as possible. This was accomplished at about 3 a.m. when the brigade left the area as reasonably safe for the time being.

Saturday 21st - At about 4 a.m. an urgent call was received from Mosterts (who occupy numerous small locations around the old Whittakers Mill townsite) to say that the fire was burning furiously all around them. An immediate call for the brigade to this area proved the call to be no exaggeration, and all that could be done here was to make buildings safe and muster stock into yards out of danger. An attempt was made to save some paddocks with a quantity of dry fodder, but fires started by sparks were so numerous that very little could be saved.

Telephone contact with the Forestry Department was to the effect that no assistance was possible from that quarter so we were to go ahead and take necessary steps to protect our own properties.

At 7 a.m. that morning an assessment of the position showed the fire to be burning down the hills on both sides of the river on W. Pollard's properties and also rapidly invading the south-eastern section of my brigade area. A report from South Dandalup told that what was believed at the time to be a tongue of the same fire, but what was later proved to be a separate outbreak, was burning in the eastern part of Fairbridge Farm area.

A portion of the brigade with volunteers burned a check break from the northern side of the river to the hills road, and was then left to burn a break on the southern side of the river proceeding south along the foothills proceeding only fast enough to prevent the fire doing damage to pastures on the flats.

About 8 a.m. Mr. C. Paterson (Captain of the South Dandalup brigade) was contacted and arrangements made for personnel and equipment to meet at the common brigade boundary at the foothills, with a view to back-burning along the foothills.

By 10 a.m. sufficient men and equipment were assembled and permission received from landowners concerned to carry out this programme. The wind, which had been blowing strongly from the east until now, had eased considerably and looked like changing to westerly very shortly. It was, therefore, decided to commence at once so as to complete the burn without undue haste.

At this stage it was essential to keep Whittakers's Mill road open as access to small parties of fire fighters who were protecting small individual properties in the hills. Everything went smoothly and by about 6 p.m. the back burn was completed in the area and parties of night watchers arranged for the various sections.

A considerable amount of work was done mopping up along the fire front during the night, but as the usual east wind proved very light no trouble was experienced in containing the fire.

Sunday 22nd - During Sunday the wind blew from the south-west all day and kept the front along the back burn quiet. However, by the same token it pushed the fire back towards Keysbrook in the forest area.

By 6 p.m. it was apparent that something would have to be done in this sector. An early start was made in back burning along the north of the Sharp and Oliver properties. By 8 p.m. the east wind commenced blowing and leaving only small groups to protect the back burn already completed, the main force of the brigade was concentrated in this area.

At this stage contact with the fire control officers of the Keysbrook area resulted in a plan to back burn along the road on top of the hills to Palmers where the Keysbrook officers would take over and back burn along a previously arranged break in this area. As the head of the fire had already burned around Bells and Rowleys it was decided to commence the back burn immediately with each brigade responsible for the sector on their side of Palmer's road.

Monday 23rd - The North Dandalup brigade commenced immediately, confident that the Keysbrook men were doing the same in their sector. At about 4 a.m. an inspection of the front proved that no back burning had been done and that the head of the fire was only a few hundred yards from the proposed break. All firefighters had returned with their equipment to Keysbrook Post Office, which was their headquarters. A hurried conference with them resulted in their return to the fire front and back burning was commenced about 5 a.m.

I stayed here till about 6 a.m. when a report that there had been an outbreak just east of the North Dandalup hall brought me to that sector to investigate. This proved to be only a small outbreak which had quickly been brought under control by watchers in the vicinity, and was now quite safe.

After an inspection and a little mopping up on our section burned overnight, I returned to the Keysbrook sector about 7 a.m. to find that the fire had crossed the road near where the Keysbrook back burn had commenced and was burning fiercely in inaccessible hills pasture and outflanking our new back burn.

Owing to the inaccessible nature of the country, the only possible course was to back burn along the foothills as was done in the southern section of the area. This was commenced immediately and progressed steadily.

Residents in the Olivers-Marshalls hills sector were notified of the position as they were still unprotected on their northern flank. By midday the back burn had reached E.C. Atkins' homestead and owing to the wind having changed to a westerly, a halt was called to enable the hills properties to be adequately protected.

An existing firebreak in portion of the remaining sector was not quite where desired, and the services of the road board grader were called upon to make a new break and link the previous back burn. This was completed at about 4 p.m. and the back burn was completed at about 6 p.m.

This completed the back burn in this brigade area and the next three days were taken up with mopping up and patrol work along the front which now stretched for about 8 miles in this area. Although numerous fires were started by sparks, all were extinguished before they could get a hold.

Comments on various aspects of fire control and prevention.

While it is agreed that the bush fire brigades did a really excellent job in this area, a considerable amount of work and possibly a certain amount of damage to properties could have been avoided if reliable information from the various fire fronts could be gathered by those in control. In cases of fires of such magnitude, portable radio sets would be invaluable. These could be stored and maintained at some easily accessible control point, such as the bush fire board's headquarters, and could be rushed with trained operators to the scene of any major outbreak.

Another factor which made it hard for the bush fire brigades to do their best was the inability to get any assistance, or even reliable information, from the Forestry Department. During the whole period of the fire I did not once see anyone from the Forestry Department in the area.

It was not possible to make direct telephone communication with them owing to the several hours' wait which it involved.

On the first occasion when I rang them, and had to leave the phone and let someone else take the call, the reply was, "The fire is 10 miles from your area; tell the farmers to go home and go to bed . . . ". While he was saying this we were fighting to save properties in our area surrounded by fires from the forests.

On the second occasion when I tried to contact them, the reply was, "We are tied up here; you will have to do what you can to help yourselves".

I venture to state that the magnitude of the fire was due largely to the dirty nature of the forest and Crown land, some of which had not been burned for over 20 years. The fire was so fierce that sparks were lighting fires half a mile or more ahead of the main face and at one stage it was estimated the fire raged 10 miles in about four hours in heavy forest country. The smoke from the fire was exactly like the characteristic atomic bomb cloud rising thousands of feet into the air.

In the area where private properties adjoin forest areas, the only effective firebreak is a regularly burned strip of sufficient width to prevent sparks jumping over on to unburned areas.

Ploughed firebreaks in these areas (where possible) are of no use except as a path to burn back from and then only if the back burn is done when the fire is still some distance away. Over the past few years there has not been enough protective burning in these areas, owing mainly to the lack of co-operation between Forest Department officials and adjoining landholders.

BY THE COMMISSIONER: You obviously had some difficulty in getting information with regard to the position and the development of the fire in the early stages. Have you any idea why that difficulty arose? For instance, when your wife 'phoned and they told her the fire was still in the Forestry area and that the farmers should go to bed and mind their own business, have you any reason why that statement should have been made?--I don't think they realised the magnitude of the fire. The idea was to get some liaison between the Forestry officers and ourselves to see if the fire could be stopped. But we did no good.

You are giving this evidence and no doubt the Forestry Department will give evidence later on as to what happened. To assist your side of the story, can you give me any reason why they might have acted in this way? You have just told us to the effect that they did not realise how big the fire was. While they were attacking a fire elsewhere, could it not have been possible for jump-overs to have occurred over some considerable distance towards your property, or lightning to have occurred, which lit fires of which they were

not aware?--I think that is quite possible. I think the fire was a series of jump-overs. Fire does not run at that speed without jump-overs. It was flung for half a mile at a time.

You are not suggesting that the Forestry Department deliberately did something to prevent settlers from ascertaining what the position was?--I would not say they did it deliberately, but that they were not aware; they just did not believe it could happen.

On page 2 of your evidence you say, "Although the main fire had not reached this point, flying sparks had started a fire by the road, just east of Marshalls". How far would those sparks have been flung?--A good half or three-quarters of a mile. It was quite a sizeable fire -- outbreak -- and the main face was still, I should say, about three-quarters of a mile away.

You say, "An attempt was made to hold the fire at this road. This proved useless and another fire soon started up nearly half a mile ahead"?--Of that one again.

Do you suggest the sparks would have jumped up to a mile and a quarter?--Quite possibly. We could see them going overhead -- big pieces of bark hundreds of feet in the air, still burning.

When people talk about burning back against a forest fire when the wind is against them, it could not be expected to be very effective?--It would take a terrific amount of patrolling.

Back-burning is something which is difficult to control?--You are back burning into the wind and the fire would not be half as fierce. It is only when the fire is going with the wind that you get these serious fires.

But you would still get fly-overs?--Yes, a certain amount.

On page 3 you say, "The wind, which had been blowing strongly from the east until now, had eased considerably and looked like changing to westerly very shortly." Why do you say "looked like changing to

westerly very shortly"? Are you basing it on what generally happens?---That is the normal pattern of winds in this area.

On page 5 you say that you found it hard to get assistance or reliable information from the Forestry Department. You say, "During the whole period of the fire I did not once see anyone from the Forestry Department in the area." Knowing the circumstances as you do now, would you suggest there should have been somebody there?---I think it would have helped considerably if there could have been one man who could have co-operated with the fire fighting. There is no-one outside of the Forestry Department who knows exactly what is burning in the area or where the fire might be checked. We who live on the flats know there are buffer strips, but we do not know the forest intimately. If we could have got reliable information it is possible the fire could have been checked sooner. Nobody in our area knew the position of the fire and we had to do the best we could.

The Forestry Department was also concerned with the fire moving in a southerly direction?---Of course, they had other worries too -- definitely.

These statements, where people were told to go home and go to bed, do you know if they were said in an officious manner, or for the purpose of reassuring people?---They may have been intended to be reassuring, but we were not reassured by them. Not taking the call myself I cannot vouch for the exact words or the tone in which they were said.

I am wondering whether your wife felt she was being treated impertinently?---The way she retold it to me she was not happy about the way it was said to her; that is all I can say.

You say, "The magnitude of the fire was due largely to the dirty nature of the forest and Crown land, some of which had not been burned for over 20 years." Do you know the private property and bush country around that part?---I know it reasonably well; but I am not very conversant with it.

Would that be in the same condition or would it be much more frequently burned?---I am sorry - -

Would that be in the same condition as Crown land, or forest, or would the private property be much more frequently burned?---Private property is not so much a serious hazard. I do not think there was any that had more than four years' litter on it.

How often would it be burned?---Regularly, by the settlers.

Under permit?---Yes, by bush fire officers.

You do not have a great deal of difficulty in getting the permission of the Forestry Department to burn that part of your district?---The bush fire brigade officer can give a permit to burn, but that is useless unless it is confirmed by the Forestry. They have the overruling say in the area.

But you do not have any difficulty, in that area, in getting Forestry agreement?---It has been quite a job to get permission from the Forestry to burn at a suitable time.

But if it is burned every four years it seems as if it is in reasonably good condition?---It is as good as it can be. No landholder wants to see his property get in a dirty condition, otherwise it must go sooner or later. It does not matter how you save it, if you build up a fire hazard it must go sooner or later.

I am concerned about statements made by more than one witness that there is difficulty in obtaining Forestry Department approval -- that the Forestry Department refuses to allow any burning. I am wondering if

you have any knowledge of such refusals?---I could not state any specific cases; but I know that quite a number of times I have issued permits for people to burn at times I have considered to be safe, but they could not do so because the Forestry Department would countermand them until after the rains, or until perhaps about the 15th May. At that time it was impossible to burn; it could not be burned.

Can you think of one case that can be used as a check?---I cannot give any specific cases or dates.

When do you think the last one was?---I do not think offhand I can give any specific dates.

I am left with the impression that a lot of people are under the impression -- without having any real knowledge -- that the Forestry Department will not permit burning on the edges of the forest?---They will permit burning all right, but at their own time.

I know?---But at that time it is not usually possible to burn.

I want to get the evidence on that point, but you cannot give any specific instances?---Not offhand.

I appreciate that such cases do occur. That is what the Forests Department permission is for?---Definitely.

You say that in the area where private properties adjoin forest areas, the only effective firebreak is a regularly burnt strip of sufficient width to prevent sparks jumping over on to unburnt areas. What do you regard as a sufficient width in a case like that?---That depends on the condition of the unburnt areas that are likely to burn. If they are burnt reasonably regularly, a strip about a quarter of a mile wide would be reasonably effective; but if allowed to get as dirty as the forests were before, about three miles wide.

You say that over the past few years there has not been enough protective burning in those areas, owing mainly to the lack of co-operation between the Forests Department officials and adjoining landholders. What is this lack of co-operation due to?---The blame may be put partly on two sides; but I think the Forests Department has not the staff for the work it is trying to do, and that may have something to do with it. Mr. Rowley badly wanted them to burn around his property last year, and he made two or three attempts to get them to burn. Two men had a look at it one day, and they said, "We cannot do it; there are only two of us. We will come back." But they did not come back.

Do you know if any instance where the Forests Department has co-operated with settlers to carry out these burns?---To a degree they will co-operate. I think they do the best they can in the circumstances of men and material. But it is the policy they have to adhere to. It is caused not by the actual men who are doing the job in the field, but it is the policy set by the ones higher up.

D.W. THORN,

I imagine you are guessing a bit, are you not?---I do not adjoin the forestry, personally, and I have not had that much personal contact with those in charge.

You are getting on to ground which would cause me to question you closely, but if you do not know of your own direct knowledge, I will not proceed further?---I will try not to commit myself about anything of which I am not sure. Not being adjacent to a forest area, I do not have much personal contact with forestry men.

Would you show us on one of these maps the places to which you have been referring?---Yes.

BY MR. McARTHUR: On page 2 of your evidence, talking about when the fire was coming into Sharp's, you say that it had run into the more recently burnt buffer strip and had slowed down to a very moderate rate of progress. The previous witness said he did not have any idea or knowledge of burning along the top of the escarpment. To your knowledge there has been burning along there. Is that so?---There are periodically small buffer strips burnt around those properties in the hills. It is only a very small strip; as a general rule only a couple of hundred yards wide from what I have seen and sometimes wider, but they are sufficient in normal circumstances to slow a fire down.

You say the fire had burnt to within half-a-mile?---That is an approximate guess at night. I did not measure it. It was somewhere about a quarter to half-a-mile.

Talking about back-burning and the fire spotting ahead, you said it was spotting quite long distances. If the main fire was doing that, there would not be much chance of a back burn holding in front of such a fire?---It would be very hard to control it, but you could lessen the severity of it by taking the terrific heat away. Where there is a fire going like that, at the face of the fire there is a terrific heat; and it very often burns steadily until it gets a go on, and you can get within reasonable distance of it. But you cannot get within a quarter-of a mile of a big fire.

Have you seen what happens when the back burn and the main fire meet in such circumstances?---Yes. There is a real willy-willy; but that was happening in the main fire. You could not have made it any worse than it was.

Frequently back burns are attempted and get away and somewhat advance the spread of the fire?---That can happen, admittedly, but I should say that on the average a back burn is successful nine times out of ten. There is the odd time when weather conditions prove a little too severe for a back burn to be effective, but in my experience I would say a back burn achieves its object nine times out of ten.

In those cases you would have the wind blowing the back burn towards the main fire?---No; very rarely. In 99 cases out of a hundred it would be the other way.

When you speak of the success you have had with back burning, most of the back burning that was successful in this area was started from the grass country?---On the border of the grass country or in the grass country, yes.

Were there not back burns attempted inside the forest which were failures and outflanked?---In our case the back burn along Sharp's road was outflanked. It should not have been outflanked if we could have got the co-operation that we should have got from the Keysbrook end. We could not get any co-operation at all. That was the difficulty at that area. I do not like to pass too many comments. The main trouble there was that there was no organisation and no brigades organised, and the fire control officers were completely under the men, and they were not there or would not give orders to do anything at all. They sat and watched; they sat and watched too long.

Do you know that of your own knowledge, or is it a conclusion you have arrived at?---I know of my own knowledge; I was there.

You did have a meeting with these people?---We did.

They had all the equipment in the world there, and they were there from nine o'clock to five o'clock and did nothing.

Do you know why they did nothing? Did they think, perhaps, the back burn would not be necessary?---Mr. Kentish was the fire control officer mainly in charge, and he wanted to wait until warning when he could see; but the fire would not wait.

BY MR. OATES: On the last page of your statement you say that in the area where private properties adjoin forest areas, the only effective firebreak is a regularly burnt strip of sufficient width. The strip that is burnt, can you say whether it is burnt by design by the Forestry; or by design by the settlers who adjoin the forest area; or is it regularly burnt as a result of escapes from burning programmes that are put into effect by the settlers themselves?---As a general rule it is burnt by design by the settlers with the co-operation of the forestry. They must get the forestry permission. Usually the forestry watch their side and the settlers watch theirs, and the strip is burnt. That is the normal procedure when it can be arranged, but it is not arranged or has not been arranged as often as it should be. Mostly it has been arranged and has been satisfactory, but on other occasions the co-operation has not been there and it has not been arranged.

(The Witness retired)

D.W. THORN,
30/5/61.

PIETER BERKELAAR,
Keysbrook, sworn and examined:
NICOLAAS BERKELAAR,
farmhand, Keysbrook, sworn and examined:

(The evidence of both witnesses was given by Nicolaas Berkelaar.)

BY THE COMMISSIONER: You are giving evidence on behalf of your father, and you can swear that the evidence you are giving is true, can you?---Yes.

Are you a landowner?---No. My father is working with Mr. Kentish, as stated in the evidence.

Is he a landowner?---No.

He has prepared a statement for the commission and you are going to read it. Will you read it?---Yes. The statement is as follows:--

Statement about the fire at North Dandalup on the 20th January, 1961.

At about 4 o'clock in the afternoon, while working on the farm, I noticed burning and smouldering ashes dropping around me, because I don't speak English very well I rang my son-in-law, Mr. T. Mostert, and he rang the Forestry. I got the answer not to worry for the fire was still 20 miles from our places; at about half past five - six o'clock, the smoke got very thick and we could see the red glow of the fire. We rang again and were told that the fire was under control and we did not have to worry - we were told this every time we rang till about half past ten.

About 11 o'clock the fire was so close that T. Mostert shifted our womenfolk and children to my son's place, who then worked on Coral Park. When he returned my place was already on fire and we were only able to save our house and sheds because of the green grass which surrounds our yard.

In my opinion and experience, had this fire been reported out of control by the Forestry Department straight away, so that we knew what to expect, it would not have been as bad as this disaster was.

Seeing that we were surrounded by Forestry bushland we had no hope of saving the feed for our cattle.

Through this fire (and then my father wishes to alter this) we had to leave our place and now work for Mr. J.L. Kentish.

If we had known that the Australian Farmers' Union and the Australian people would give that big help, we would have stayed longer and tried further. The statement continues --

It was impossible to get near the fire in the forest because it was badly neglected, and there had been no timely burning to clear dead wood and leaves; through this cause the fire was an unstoppable disaster due to its heat and speed. The bush was like a bomb explosion and pieces of wood flew sky-high. In my opinion the neglected bush was THE reason that this fire could not be checked.

At 2.30 the first arrived to help, and these were not sent by the control officer.

Our places were burnt by the fire out of the Forestry, while the Forestry Department told us they had it under control.

This statement will I, Pieter Berkelaar, repeat under oath and is true.

(Translated from the original in Dutch by his son, Nicolaas Berkelaar).

BY THE COMMISSIONER: When your father, or your people, was ringing the Forestry officer at Dwellingup, can you give the Commission the accurate time? You say it was about half past ten. Can you be

more accurate than that? You say: "We were told this every time we rang till about half past ten."?---That is about the right time. Then the glow of the fire disappeared a bit. It entered a swamp. My dad thought the fire was under control, and there was no reason to ring any more.

Half-past ten is as early as you can get to it?---That is right.

Were you able to get through to Dwellingup on the telephone without any difficulty?---Yes; my dad rang through to Mr. Mostert, and he rang through to Dwellingup; and as far as my own knowledge and my dad's knowledge goes, he never had any trouble in ringing through to them,

Your people did not speak direct to Dwellingup--it was Mr. Mostert?---Yes. It was from my dad's place to Mostert's--it was a party line. It has to go to Mr. Mostert's place before we go anywhere else. My brother-in-law talked to the Forestry for him.

From your father's place?---No, from Mostert's place.

Has Mr. Mostert seen this evidence?---Yes; he saw it last night.

In evidence your father says: "There had been no timely burning to clear dead wood and leaves." What part of the country was he speaking of--immediately east of his place? If it was, then how far to the east?---The place was pretty well surrounded with it.

Had you done any burning on your own property, or is it all cleared country?---Just about all cleared country, bar a couple of trees there.

Did you have any fire protection at all around your property?---The property was surrounded. Near the house was all green; in the back was all gravel. That was the only protection against fire.

He had not done anything of his own accord to provide fire protection, apparently?---He only made a bit

of a break between the house to save all the chook bins and all that.

BY MR. McARTHUR: On page 2, when you refer to "2.30" is that 2.30 on Saturday morning?---That was when my brother-in-law took all the womenfolk to my place. Then he took some help up -- that is the help meant. It is 2.30 a.m. -- early in the morning.

At that time, had you any idea or can you describe where the fire was; or whether you could see it?---The fire was, at that moment, past the place. An arm of the fire was past the place. It left us only a little road where my brother-in-law could go through.

Was the fire to the south?---It came from the top of the hill to the road -- that is, from the east.

BY THE COMMISSIONER: You say that the first to help arrived at 2.30 a.m., "and these were not sent by the control officer". Why do you say that?---My father has not go a special reason to say that.

It is not meant as a reflection on the control?---No. Those people came because Mr. Mostert rang them.

This property you have there, was it leased or rented?---Rented, really.

THE COMMISSIONER: Thank you; that will be all.

(The Witness retired).

EDWARD BRIAN BIRMINGHAM, Orchardist
and Grazier, of Dwellingup, sworn
and examined:

BY THE COMMISSIONER: What is your full name, please?---Edward Brian Birmingham.

And your address?---Dwellingup.

Your occupation?---Orchardist and grazier.

You are a landowner in the district?---Yes.

Where is your property?---About a mile and a half south of Dwellingup townsite.

Do you know the location numbers?---94, 687, 1103, 1104, 1105 and 1324.

You have prepared a statement; would you read it, please?---Yes.

I consider past policy of the Forest Department, in regard to controlled burning, to be the factor responsible for the destruction by fire in the Dwellingup area.

Farming properties were surveyed and taken up many years before the Forest Department -- as now constituted -- was established. Experimental compartments (some of these compartments of upwards 500 acres had not seen fire for over 30 years and were virtually powder magazines) from which the department hoped to permanently exclude fire, should not have been sighted near the township or adjacent to farming properties, where they constituted a dangerous hazard to private property.

With a few notable exceptions landholders have been co-operative towards the department in keeping their fires confined within their own boundaries.

No reflection whatsoever is cast on officers of the department in Dwellingup, or of the present administration. For 20 years it has been inevitable that we must experience a bad forest fire, but none imagined it would assume the proportions which it did.

The back lag of controlled burning could not safely have been made up in the few years allowed.

E.B. BIRMINGHAM,
30/5/61.

BY THE COMMISSIONER: I do not know that I can ask you as much as I would like on the evidence, except that you say that with a few notable exceptions, landholders have been co-operative towards the department in keeping their fires confined within their own boundaries. Do you mean that the landholders have kept the fires that they lit themselves within their own boundaries?---That is correct. The Forests Department has been co-operative in burning a strip between their breaks and the fences in most cases; and I think that where the landholder was prepared to co-operate, the Forestry was prepared to co-operate.

The co-operation has been satisfactory?---In most cases.

You say, "With a few notable exceptions". Can you say on whose side the fault may have lain in those notable exceptions?---There was one chap who did not co-operate, but when he saw fit to burn he did. It is rather ironical that he is the one who did not suffer from the fire.

When you say it is ironical, it is perhaps because he burned that he was saved?---That is it.

At the same time you people who were co-operative must have burned, too, or else there would not have been co-operation?---That is correct. The location of the experimental plots and such like made the fire such that nothing would have stopped it. We were right in the path of it and it just had to go through until it wore itself out.

The circumstances are not such that you think these people who were co-operative in the past would not continue to be co-operative in the future?---I think they would continue to be co-operative. There was nothing that the department could have done once the fire reached the stage it did. My feeling, and the general feeling, is that the fire could only have been stopped on the 20th and the 21st. If sufficient manpower and equipment had been available, they might have stood a chance, but not otherwise.

Were you associated sufficiently with the fire to say to what extent they needed equipment and manpower to stop these fires on the 20th and the 21st?---I do not know whether they asked for more assistance and were not able to get it, or whether they did not ask for it.

I do not know what manpower they had there, but supposing they had 30 men, how many more would they have needed to do the job?---From hearsay, there were approximately 20 lightning fires started in the area. I do not know the strength of the Forests Department, but I suppose it would not be greater than 60. That meant that with many of these fires three men went to them in the initial stages. Well, three men were just not enough to contain these fires.

What would you think would have been a satisfactory unit?---Mr. Beggs could answer that better than I could.

I know that. If you do not feel that you cannot give useful information, then do not say so?---The distance some of these fires started form the headquarters of the department would be upwards of 20 miles. With the severe fire hazard, when these fires were first reported they may only have been a chain in diameter. But in the time it would take to get men to them, they could well have been covering 400 or 500 acres. Whereas at the time the fire was reported, three men could have controlled it, at the time they got there, they may have needed 20 men for all I know.

With the weather conditions as described, you would have done well to control it with 20 men?---Yes.

Did you lose all your property?---I saved the bulk of one building out of 10. If I had received earlier notice that it was completely out of hand, I could have got more assistance from friends and relatives more fortunately situated. Every man meant another building saved.

It was just a matter of being able to stand by the buildings and keep them sprayed with water when the fire showed up?---Yes. I saved one building purely and simply because I stood by it and was able to get water on to it. I was warned that the fire was out of control at 20 minutes past 7 p.m.

On which day?---On the 24th. The fire had gone through at 8.45.

That morning?---No, that evening. That was about an hour and a half later. It had gone through completely.

How could anybody have warned you? Did you have the telephone on?---Yes. I was warned by telephone at 20 past 7.

Who phoned you when you got the message?---The postmistress at Dwellingup.

Was your property on the south side or the north side of Dwellingup?---The south.

The fire must have gone through Dwellingup by the time she phoned you?---No, not at all.

When did the fire go through Dwellingup?---I do not know. There is too much conflicting evidence on that. I can only vouch for these times: 7.20 was the time I was phoned, and after the fire went over it seemed about 12 o'clock, but at the time it was all over I asked a lady who was there and she consulted her watch and said it was a quarter to nine. Everything was over and done by then. It was travelling at about 70 or 80 miles an hour when it went through there.

Do you think it was really as fast as that? That is very fast?---I know that the wind force was not less than 80 miles an hour.

That is so, but the fire would not be travelling at that rate, would it?---Yes, just as fast, because it was going from spark to spark. I occupy the north end of a gully, and the first fire we saw was in the middle of the gully. It was more of an explosion than a fire. The top fire went through and the ground fire followed five minutes later.

For how long do you think it was travelling at that rate?---After it crossed the road and railway line there was a really cyclonic wind, and I would say that within a matter of 10 minutes it had crossed the river and was on its way to Nanga Brook.

Did the wind blow for a very short time?---It lessened about half an hour after the main fire had gone.

I was thinking that if you are right in saying it travelled at 70 or 80 miles an hour, in half an hour it would go 30 miles?---Quite true; it could well have done.

Did it?---I would not swear to that. But I would say it reached Nanga Brook within 10 minutes of passing through my place; and Nanga Brook would be 7 miles as the crow flies.

Is there anything else you wish to tell us that you think might be useful to the Commission?---No, I do not think so.

I think that is a very fair-minded statement in the circumstances, and I thank you very much.

(The witness retired).

Sitting suspended for lunch

JOHN GRIFFIN MONEY,
Farmer and Pastoralist,
of "Coral Park" North Dandalup;
sworn and examined:

BY THE COMMISSIONER: What is you full name and address?---John Griffin Money, of "Coral Park", North Dandalup.

And your occupation?---Farmer and pastoralist.

Are you a landowner in the district?---I am.

Would you please tell me where your land lies roughly--the location of it?---I am immediately opposite the North Dandalup railway station.

I want to know where you stood in relation to the fire?---My property is mainly on the west side of the line, and it is within half-a-mile of the fire line.

You have prepared a statement of evidence for the commission?---I have.

Would you read it, please?---Yes.

I am a bush fire control officer of the Murray Road District, and am one of the two lieutenants of the North Dandalup brigade.

On Friday afternoon of January 20, 1961, a bush fire of larger than usual dimension was evident well back in the hills east of North Dandalup. On Friday night, our brigade was alerted to inspect this. This fire had advanced rapidly and was menacing Sharp's property (some three to four miles in the hills east of North Dandalup).

In company with brigade captain Thorn and others, I proceeded to Sharp's to assess the situation. It was found that the fire was at the back of Sharp's (that is, east) and along their southern boundary--Sharp had taken action by burning a break along his southern boundary and was holding the fire at that point. The fire was advancing towards Dick Marshall's property and it was necessary for Marshall to light up along his road to protect himself--he completed this about midnight.

It was obvious that the fire was of most serious nature and out of control. It was decided that we could do little until daylight and could only hope that the fire, fanned by considerable wind, would not reach the foothills before then. It was decided to assess the fire again at first light and then take what action considered necessary.

I returned to North Dandalup and commenced to organise our brigade, and contacted Keysbrook--informed them of the position and requested firefighters and equipment to meet at Pollard's road at about 5 a.m. The fire travelled quickly during the night and was visible on the tops of the hills from North Dandalup at approximately 4 a.m. The fire had split, having two spearheads--one travelling due west and menacing Pollard's property--the other travelling south-west and heading across the hills towards properties owned by Dr. Gillett and Mr. Wade.

At approximately 5 a.m., the brigade commenced to burn a break in Mr. Pollard's property from the north side of the North Dandalup river to Pollard's road to meet the oncoming fire. When this was completed, a burn back along the south side of Pollard's road was commenced, this burn to be taken right up the road past Hassell's corner and up to Marshall's--this having the effect of containing the westerly spearhead of the fire. The fire by this time, of course, having burnt all around Marshall's.

Realising that the situation was serious and knowing that several of our fire-fighters and control officers were holidaying in the Mandurah area, I rang the A.B.C. at approximately 6.10 a.m., requesting that they put a call over the air appraising these people of the position and requesting that they return to their properties without delay. This the A.B.C. did, repeating the message on several occasions during news sessions.

By 9 a.m. the second fire front (the one which had travelled south-west) had covered considerable ground and had reached a point in the hills at the rear of Dr. Gillett's and Mr. Wade's properties.

At a meeting between the North Dandalup brigade and control officers from the South Dandalup and Pinjarra area, held at the south boundary of Mr. Wade's property, it was decided that no time should be lost in burning back along the foothills--North Dandalup to be responsible for the section from that point, north to Pollard's road, and Pinjarra personnel from that point south, as the situation demanded. The burn back was commenced at approximately 10 a.m. on the Saturday, and our section was completed by 7 p.m. The line was held during the night under hazardous conditions, occasioned by strong easterly winds. A break-through occurred at Johnston's property at approximately 6 a.m. on the Sunday morning, being noticed immediately, and this was contained.

At this time, the front that the North Dandalup brigade were controlling extended from Wade's southern boundary to North Dandalup--up Pollard's road and around to Marshall's--a distance of approximately nine miles.

By Sunday evening, the fire from behind Sharp's had travelled north and was menacing Oliver's and Gray's. It was decided to burn a protective break just behind these properties along the north side of a creek which was semi-green and admirably suitable for this purpose. There was some difficulty in burning some of the area at night because some of the country had been burnt previously; I understand some 18 months previously.

The main fire at the back (east) of Sharp's, Oliver', Gray's, etc., had extended considerably northward and the plan of defence was to burn a break along the eastern edge of the road connecting Oliver's, Gray's, etc. to Palmer's corner--this was to be done jointly by the North Dandalup and Keysbrook personnel. The northern end of this line was not completed in time and the fire jumped

across the road at Palmer's corner under the influence of a strong north-easterly wind a.m. on Monday. Keysbrook personnel assumed responsibility from Palmer's road to Robinson's property and North Dandalup from Robinson's property south to North Dandalup (Pollard's road). A break was burnt from this point (Robinson's) southwards along the foothills in Atkin's property and connected to the original break (southern flank) at Pollard's road -- this break was completed by 5 p.m.

The wind switched to a north-westerly during the afternoon and this resulted in Hassell's property being endangered -- many men and much equipment had to be directed to this front.

My responsibilities and actions during the fire were as follows:-

On the Saturday, I continuously patrolled the front of the southern flank -- there is a road all round that front; I think I did 250 miles in the day -- set up a control post on the front porch of Coral Park (facing the fire) and was in contact by telephone with those watching and patrolling the front that night; this all Sunday until my presence was requested at Oliver's on the Sunday evening -- my wife watching the phone during my absence.

At control post all Monday and Tuesday, Wednesday.

I was in continuous communication with posts along the fire front -- Wade's, Gillett's, Murray, Johnston's, Pollard's, Atkin's, Marshall's, Oliver's, Pinjarra Control headquarters -- Keysbrook control headquarters -- directed men and equipment where required according to circumstances; was continuously appraised of the situation; was given excellent assistance and co-operation by Pinjarra and Keysbrook. I also was in constant touch with men and equipment being held in reserve at points behind the fire line.

I attach a record of the fire situation depicted by diagram -- this was done immediately after the fire.

This fire was the worst I have ever experienced. I do not wish to see another of similar proportion.

The main causes in my opinion --

(1) Too much fire hazard in Forestry and Crown land occasioned by lack of regular and frequent burning.

(2) The weather which was heat-wave conditions, accompanied by semi-gale force winds.

(3) Bush country to be safe, in my opinion, should be regularly burnt every two years, or as often as it will burn.

The prompt and effective action taken by the North Dandalup, Pinjarra and Keysbrook fire-fighting organisations in my opinion saved Western Australia from what might have been a national disaster, very much greater than that which actually occurred. Had the fire not been contained in the hills when and as it was--owing to weather conditions, dry grass of the farming areas, etc.--the whole of the closely settled coastal plain would have been consumed.

This fire originated in forestry land and was fought entirely in our section by local bushfire brigades--farmers and latterly by volunteers. During the whole course of the fire did not see or hear of any representatives of the Forestry Department being present.

I would like to qualify that. On the evening of the Friday at Sharp's when we went up to have a look at the fire, from a distance there were personnel fighting the fire, and I do understand they were forestry personnel. But my reference here is from when our organisation became involved. On our whole front, it was purely our own organisation.

It might appear that if the Forestry Department are unable to contain fires which originate in land under their jurisdiction then some arrangement should be initiated to authorise bush fire brigades to take over responsibility of combating fires in Forestry land before it is nearly too late. I say this purely in constructive criticism realising that the Forestry Department has limitations, not only in personnel, but also in finance, and cannot be expected to be everywhere on all occasions.

I consider there is no better method of fire control, than that as now in operation per medium of the Bush Fires Board, through the locally organised Bush Fire Brigades--the organisation is becoming more efficient as time goes on--could be assisted and improved by Government grant or assistance towards better and more up-to-date fire-fighting equipment. At present all fire-fighting equipment is provided by local farmers and/or road boards, etc. Communications are essential, the cost of which, unfortunately, is generally out of reach of most organisations.

An over-all centralised control to take over operations, in cases of the more serious fires, in my opinion, would not be practicable. The responsibility of fighting the fire must be left with the experienced local individuals who understand and know their country, equipment and conditions, and who, by the very nature of their experience over periods of time have learned to develop and use initiative according to circumstances.

J.G. MONEY,
30/5/61.

As both pasture and hill country carry more growth as a result of land development, protective and preventive burning becomes more than ever a must. Sometimes the regulations regarding closed periods or protective burning become a double-edged sword. There are occasions, according to season, that it would be in the interests of a district to burn, when actually not allowable by law.

However, in the Murray Road district, burning is well controlled by Bush Fire control officers who are appreciated, and receive excellent co-operation from farmers generally.

I have the diagram here which I referred to.

THE COMMISSIONER: Would you please hand that diagram in as an exhibit for the information of the Commission.

EXHIBIT EXHIBIT A10: Diagram of fire situation submitted by J.G. Money.

J.G. MONEY,
30/5/61.



Ln/Bly

BY THE COMMISSIONER: To enable me to get a picture of the whole business, as I understand it you are the captain?---I am a lieutenant of the North Dandalup brigade.

Yes. And on your northern side you had the Keysbrook brigade, and on the southern side the Dandalup brigade?---South Dandalup.

And then Pinjarra?---Yes.

Did you find that the message through the A.B.C. was very effective? Did people come back?---Yes, they did come back.

Speaking of around Palmer's, you say on page 3, third paragraph, that the northern end of this line was not completed in time and the fire jumped across the road at Palmer's corner under the influence of a strong north-easterly wind. The northern end of this line was to have been completed by the Keysbrook personnel?---From Hassell's corner past Oliver's and Gray's and Palmer's, the arrangement made between their personnel and Captain Thorn was that they should burn along the east side of that road, and North Dandalup was, from a point, going to burn south, and Keysbrook was going to burn north. I understand that the burn north had not been able to be completed in time. It may have been occasioned by some country that had been burnt 18 months before; but it was not put through.

As far as you know, were the Keysbrook people concerned as to whether it was necessary to light that fire break?---By that time I was at my control point and I was being apprised all the time by people who were on the line.

Didn't you attend the conference with the Keysbrook people?---No.

You speak of country that had been burned 18 months previously. Was that forest country?---I understand so, yes.

All this summing up of the situation that you have given me was not your personal experience, but built up from what you knew from messages that came through and that sort of thing, was it? In the first part of the

paper you tell me that by Sunday evening the fire from behind Sharps had travelled north and was menacing Olivers and Grays. Were you there to see that?---That was on the occasions when I was asked to go up. I refer to it here. I actually went up to Olivers and Grays; but generally speaking yes, after I set up the control post on the Saturday night. I patrolled the whole of the southern flank all Saturday, keeping Thorn informed of everything along the line and sending men and equipment to what I considered danger points. After that period on Saturday night, I then set up the control position on my own property, and all reports were fed into me continuously apprising me of the situation and what was happening.

Therefore some of the information you have given me here is not based entirely on personal observation, but on information you gathered during the fires?---Yes, from our brigade.

You were not here this morning, but I did ask witnesses to make it perfectly clear whether any evidence they gave was based on hearsay, or whether it was from their own knowledge or experience?---I was not here this morning.

You say that the main causes with regard to the fire were due to three reasons -- one that there was too much fire hazard in Forestry and Crown land occasioned by lack of regular and frequent burning. Would not that also apply to private property? Was not private property not burnt to the extent you would like to see it burnt for safety's sake? Does your property extend into the hills?---I have property in the hills, and that is burnt fairly regularly -- at least every two years.

What was your general impression about the private property along that escarpment?---I would not think that on an average it would be burnt every two years, but it would be burnt more frequently than the Forestry

land because it is relatively such a small area.

And that would be burnt under permit obtained from fire control officers, and not by accidental fires? It would be burnt by control fires, would it not?---On my property there has always been a fire. I have not started it.

It has always happened?---Yes. I think I have burned it once in co-operation with Mr. Pollard who is adjoining.

You say that throughout the whole course of the fire you did not see or hear of any representatives of the Forestry Department being present, other than the evening when you met somebody at Sharps. Did you feel that they ought to have been there? Do you mention that as a fault on the part of the Forestry Department?---I think there was a feeling by our personnel that perhaps they should have been there.

They would realise, now that the fire is over, that the forestry people would have been pretty well occupied on other sections of the fire, and that this one probably got ahead of their operations?---We were in the firing line because at that time of the year you get very strong easterlies. We were sort of in the front of the fire. Ours is a very bad district for fire in the summer time. We get easterlies at 40 and 50 miles an hour at night.

Had your brigade made any arrangements with the Forests Department as to what action would be taken in the event of a fire like that coming through?---Not to my knowledge.

Is there any reason why they should not co-operate to that extent?---There should be a lot more co-operation. I do not think there has been much in the past.

Is there something which stops it or which has prevented that co-operation? Is it disinclination on the part of either party, or both; or is it just apathy?---I do not think it is apathy. I think the forest land has always been holy ground.

There is one difficulty. You say, "It might appear that if the Forestry Department are unable to contain fires which originate in land under their jurisdiction, then some arrangement should be initiated to authorise bush fire brigades to take over responsibility of combating fires in Forestry land before it is nearly too late." Would not you as an officer of a fire brigade, coming on a fire in Forest country, take action to stop the fire if there were no forest officer there to give you approval or consent? Would you feel you had to wait until you were off Forest land before you could tackle it?---I would not, personally.

Somebody has suggested that your insurance does not cover your operations on Forest land. Do you know if that is right?---No. I understand you must not on any account light a fire or drop a match or do anything on Forestry land.

That is normally so; but if a fire is approaching you?---We did it. Marshall did it to save his property. If you see a big fire bearing down on a house, you will do what you can; but at the moment there does not appear to be any machinery to allow a brigade to go in and light a break in Forestry country to save a property or do the right thing. Anyone who does that is probably breaking the law in the present circumstances.

Yes, but I would quite expect -- and you tell me if you think my expectation wrong -- that if you tried to contact the Forests Department and inform them that you were going to take some action, or were going to a fire and would take action there, and you got no response from them, you would -- the ordinary person would take any action he thought necessary to save life and property when he got to the fire?---Yes, I would.

You would take responsibility on my own in that case?---Yes, the fire might get away and lead to a lot of other things.

I would have to put up with that. I am left with the impression from the evidence given from time to time that there is a certain scarcity of members of bush fire brigades among the inhabitants along the scarp, or people in the forest land there who know the country well. Do you find that in your road board?---I would not think so in our particular area. I think pretty well everybody in our area who has land on the scarp is a fire control officer.

And a member of the bush fire brigade?---Yes.

I am surprised at what you said before, that nearly everybody is a fire control officer?---In our particular area.

In the road board?---No; I am referring to the North Dandalup area where the North Dandalup fire brigade is responsible. I think pretty well everybody is a member.

I was confusing the bush fire brigade district with the road board?---I see.

You suggest there should be a Government grant or assistance towards better and more up-to-date firefighting equipment. Is that the general feeling, do you think, amongst bush fire brigades?---The type of equipment that is necessary is pretty well out of the reach of most people. The big proportion of farmers have firefighting equipment, but it is just the normal firefighting pump. With a fire like this, particularly, you want a pretty high pressure pump. You get the dead trees just behind the line, and if they are 100 yards away they are not safe, in the weather conditions we have, to contain them. You want something that will squirt water much higher than the normal firefighting pump will; and probably something that is able to carry more water also. That type of pump would require more water.

If you were asked for specifications of the pump you wanted, with regard to horsepower and the height

to which it would throw water, could you give them to me?---I would like to see it throw up to 50 feet.

Have you got pumps of that type in your brigade at the present time?---No. All our trees had to be taken down with a mobile saw as quickly as could be done. A lot of them, where the ground was a little too rocky to get a mobile saw in, had to be taken down by the axe. A lot of this country is dead timber back from the line, and you get high winds and trees alight everywhere. You never know when your work is safe.

What do you mean by a mobile saw -- a circular saw?---Yes.

Not a chain saw?--One that pushes and propels itself.

There are also power chains saws, but I would not expect you to have them in the ordinary fire district?---We have not got them, but I think they would be a great acquisition.

I think that the type of equipment I am referring to should be a unit which could be used for any purpose--which you could use for anything you wanted. We had two mobile saws. There would be a call for one and it would have to be brought up about three miles. If you had a heavy unit and it was equipped with a chain saw, it would alleviate that and you would be able to have a tree down before the fire jumped a break.

Suppose brigades were equipped with that equipment, who would look after it--one member of the brigade?---I do not see why not.

Could you rely on the equipment not being used for other purposes--it could be used by settlers in the district in burning off?---Yes. The whole idea of the brigade is that if I have a number of men in bush type of country, I put it in the hands of the brigade.

It has been suggested that there would be difficulties in getting people to adequately look after that sort of equipment?---I would not agree with that. A captain of a bush fire brigade is a fairly reliable individual; and you have your road board in the area.

What do you mean by the "road board"? Do you mean that they might look after the equipment for you?---I do not see why not.

The suggestion has been put forward that they have so many responsibilities that a fire would not be of such prime importance with them as it would with a fire brigade unit?---I think the captain of the brigade or one of the lieutenants could select a person to look after that. I know that if I were asked, I would do it.

BY MR. McARTHUR: It was indicated this morning that the main reason why scarp settlers desired the burn was to get a good seed for their clover--is that right?---The expression used was "sowing clover on the burn"?---A burn, naturally, is the best thing that clover could have. I think it is purely a process in the

development of the land. The whole idea is to convert the scrub from bush to pasture, and that is being done--and more quickly these days with the advent of aerial supering and aerial seeding. You want to get rid of your scrub in order that your clover can grow.

Your aerial supering and seeding is not getting rid of your logs and timber on the ground--that has to be burnt?---Yes, over a period of time.

I am a little bit intrigued about this. I have seen a lot of improved pasture in other States and I have never seen the necessity to sow on burnt ground. I was wondering if that was a practice peculiar to this State?---I think that if you sowed clean clover seed on ground that was not burnt, you would be wasting most of it. You usually sow clover burr on that type of country.

BY MR. OATES: In your experience, would you think it would be an advantage to have, sometime after the forestry completed its protective burning programme for the year and before the dangerous fire period commenced, a conference for the purpose of getting full co-operation between everybody concerned: Namely, the forestry; the farmers below the scarp; the farmers down on the plain; bush fire brigade officers; road boards; the Bush Fire Board; that if such a conference had possession of up-to-date maps and all details necessary to work out a fire plan for the coming year, do you think that suggestion would be practicable and useful? If you had that plan worked out before the actual danger period came; and everybody knew their role and there was no confusion; and everybody knew, as far as possible, what was in the mind of everybody else in relation to the fire hazard period, do you think it would be beneficial and serve any good purpose?---I think it would be practicable; and I think it is most desirable. I do not think there is any reason at all why there should be any difficulty in

building co-operation between farmers and the forestry? I think that a standardised map is most essential. We had a meeting after the fire, with the Keysbrook section; and I do not think the Keysbrook section of the map was the same as ours--one was older than the other. I think a more up-to-date map from the forestry showing the Pinjarra section, the Keysbrook section, and others, would have a lot in its favour.

BY THE COMMISSIONER: Did you ever try to get maps from the Forestry Department?---No, I do not think so.

Is there anything else you wish to add which you think might be of assistance to the Commission?---I do not think so; I have just tried to tell you what went on from our point of view.

THE COMMISSIONER: Thankyou. It is a very clear statement. That will be all.

(The Witness retired)

J.G. MONEY,
30/5/61.

Ln/Bly
K3

WALTER PENDRED KING, Small Farmer and
Agricultural Contractor, Dwellingup;
sworn and examined:

BY THE COMMISSIONER: Is your full name Walter Pendred King?---It is.

Is your place of residence Dwellingup?---That is so.

What is your occupation?---I am a small farmer and agricultural contractor.

Are you a landowner in the district?---I own 100 acres.

Can you tell me the location number?---No. 501.

You have prepared a statement of evidence for the Commission; will you read it, please?---Yes.

My property is situated in the forest area approximately two miles from Dwellingup, and was burnt out by the fire of 24th January, 1961.

Experimental plots controlled by the Forestry Department have not been burned, to my knowledge, for at least 20 years, and constituted a very severe fire hazard, which contributed to the fierceness and intensity of the fire.

No serious warnings were given to the public by Forestry Department, of the fire until it was too late for the local people to take any effective control measures. If we had been warned earlier we could have obtained local settlers and workers on the spot and, in my opinion, could have saved a lot of property that was burnt.

At 4 p.m. on 24th January, I was concerned for the safety of Wild's property three miles north-east of Dwellingup and I contacted the Forestry Department (Actually through my neighbour's telephone) re fire breaks and was told that it was not necessary, but go out if I liked. Accompanied by my son I went to Wild's and fixed firebreaks and was back at my own property shortly after 5 p.m. The fire was through my property within a few hours, and this illustrates that the danger must have been apparent to those in control long before we were notified.

If the Forestry Department had admitted that the fire was out of their control earlier and settlers had been warned of this, efforts would have been made by the settlers to fight the fire locally and, in my opinion, could have resulted in some considerable saving in homes and property. Equipment would have been available to do this.

I consider that in future organisation for fire control an experienced fire control officer should be appointed (I refer to Dwellingup) and he should work in full co-operation with the Forestry Department equipped with efficient communications equipment.

BY THE COMMISSIONER: Whereabouts is your property from Dwellingup?---Two miles southerly--a fraction more than two miles--location 501.

And your property was burnt through in the fire, I take it?--It was.

Shortly after Dwellingup was burnt, I suppose?---I do not know. I was not in Dwellingup. But I can tell you it lit shortly after dark and it lit--we had an horizon of about a mile in the direction of Dwellingup; and when my property lit there was no naked flame to be seen. The fire that hit my place came down out of the sky.

You say, "No serious warnings were given to the public by the Forestry Department of the fire until it was too late for the local people to take any effective control measures"?---Yes.

Are you on the telephone?---I have an Army type of telephone; it connects with my neighbour, Mr. Birmingham, who gave evidence this morning. We talked to each other across the creek--over half-a-mile of private line.

He is on the phone?---He is No. 14 on the phone.

Did you try to obtain any information from Dwellingup about the fire before 4 p.m., before you went to Wild's?---Yes; we asked Mr. Birmingham whether Wilds were in danger, and I understand he contacted the Forestry Department.

What time was that?---That would be between 3 and 4 o'clock. I do not know whether this is relevant, but I have lived in the district for 40 years and I myself thought there was no danger.

You knew there was a fire in the district?---I could see it on the horizon.

And the Forestry Department, from where you rang them, did not think that Wild's property was in danger?---I do not know whether that would refer to the danger at Wild's. I think they were wanted to vacate their property.

You say, "If the Forestry Department had admitted that the fire was out of their control earlier and settlers had been warned of this, efforts would have been made by the settlers to fight the fire locally." Is there any suggestion that the Forestry Department hid the fact that the fire was out of control or that they failed top notify the public?---No. I think--I am sure--they had lost control of it. I am not saying anything against the

officers; I know they tried hard. But the fire had them beat for a day, or two days, before I was burnt, and if they had notified the public we would have had more help. I will give you an instance: On the Monday I went to Bassendean and carted home a load of super for a neighbour. On my return, at Gosnells I picked up my grandchild aged 4½. Had I know it was dangerous, or had his parents known it was dangerous, his parents would not have let him come with me. During the worst period I carried that child around looking for a safe place for him; and my wife carried a neighbour's baby from place to place.

Do you think it likely that the forestry officers, like yourself, did not appreciate the danger of the fire; did not appreciate it had developed to the extent it did?---They hoped for a change, evidently; hoped for a break from Providence.

You had no fear of the fire yourself?---I had no fear at any time. I had the utmost confidence in the department.

When you say that in future organisation for fire control, an experienced fire control officer should be appointed at Dwellingup, are there no fire control officers around Dwellingup?---I understand that Mr. Cloutt, the garage proprietor, is the fire control officer. Mr. McCoy indicates that that is so.

Do you mean that a man who is more in touch with actual operations in the country round about should be the fire control officer?---A man who is a landowner and has a long period of outside experience should be in that position.

Do you think that would have made any practical difference to the situation in the case of this recent fire?---A little more co-operation, maybe, from the fire control officer earlier in the piece would have done some good.

BY MR. HALE: You say that if you had been warned earlier, that you could have got equipment, or that equipment would have been available?---Yes.

What equipment and where would you have got that equipment from?---I have equipment. During a fire I have two sons: one is employed in the metropolitan area. Had he known, he would have flown to my aid. My younger son, aged 25, and I, patrolled our house all night long with hoses in our hands. We had an engine and 200 ft. of aluminium pipe and sprinklers lying idle. We could have put them in a pool adjacent to the house and had an acre of land sprinkled around the place had we wanted to.

BY THE COMMISSIONER: Did you lose your house?---No.

You saved it by means of the hose and the water supply?---Yes.

BY MR. MCARTHUR: You said that your house, or property, caught alight by a spot fire, if we may call it that. Have you any idea what time of the evening that was?---I think it would be just a little after dark--may be half-past eight.

When you were out at Wild's property at 5 p.m., what was the position?---I was home by that time. The fire was burning vigorously around Banksiadale--in between Dwellingup and Banksiadale.

It was not at Wild's?---Not at that time.

BY THE COMMISSIONER: You went out to Wild's at four o'clock and found they had evacuated the property?---No, Sir; they were there, but they were contemplating evacuation; and I had such confidence in my own experience and in the Forestry Department, I had the break ploughed around and advised them to stay put. Afterwards, Wild's told me that had they stayed and battled they would possibly have saved their house. They had a pump and water. It was the cyclonic conditions that beat almost everybody.

BY THE COMMISSIONER: Do you know the number of Wild's location?---No.

Is there anything else you wish to tell us that you think might be of assistance?---The dirty condition of the forests can be controlled. The seasonable conditions we cannot control. The two in conjunction were the cause of the trouble. Our situation up there in the mountains is entirely different from that of the previous witness. Our conditions in that jarrah country are entirely different from his.

Yes. I have been through that country, and I think I know the experimental areas to which you referred. Do you have any country between you and the experimental area that had been burnt over in recent years?---Only small patches. I burned all along the road verges of my property, and I burned several acres of an absentee owner's property adjoining mine. I took the law into my own hands and burned that in October and November. I did everything possible. The Crown edges, I dared not touch. Anyhow, a firebreak would have been of no use because the fire came down out of the sky.

When you say you dared not touch the Crown edges, did you ever endeavour to get the Forests Department to do more burning around that part of the world?---I have asked them.

What has been the general answer?---They work away in August and September; and you are very fortunate if you can burn anything in those months. I burned possibly 10 acres of this absentee owner's land that I referred to, I think, early in November. I swept it clean. There was a very dirty patch that had been there for many years. It had not been burned, and I swept it clean, and when this fire came through the leaf fall was on the ground, and it swept it clean for the second time within five months.

Is there anything else you wish to say?---No.

(The witness retired).

ROBERT GEORGE HULL, Farmer, Waroona,
sworn and examined:

BY THE COMMISSIONER: Are you a landowner in the district?---Yes.

Can you tell me where your locations are?---The house location is 525 in the Murray.

Whereabouts are they?---On the Nanga Brook Road.

You are a fire control officer?---Yes.

Are you also a fire brigade member?---Yes.

To which brigade do you belong?---I control our eastern brigade and the whole of the country on the Nanga Brook Road.

Are you recognised as a captain or a lieutenant?---I am the captain.

You have prepared some evidence for the Commission. Will you read it please?---Yes, it is as follows:-

> I live 2½ miles east of Waroona in the hilly bush country. I was present at the bush fire that burnt in this area on 24th January, 1961.
>
> In my opinion the cause of the fire was lightning.
>
> While the fire was burning in the Dwellingup area and had not crossed the Murray River, in company with Mr. Kenny I made a survey of the situation on the spot to try and decide effective means of combating it, but before we could take any measures to try and control it, the fire had broken through.

This more or less comes under a meeting we had that afternoon at Harvey. It will be explained more fully from our brigade headquarters report.

Who was responsible for putting in the headquarters report?---Mr. McNeil.

That will come later?---Yes. There were several of us -- myself and three or four others -- who put things in that report. My statement continues --

> I consider the size and fierceness of the fire was contributed to by the two dry seasons experienced and to excessively high temperature prevailing at the time, which increased the intensity of the fire once it had started. In addition to this a 40-45 mile per hour north-east wind was blowing at this time (about 7 p.m. 24th January, 1961).

We encountered that wind when we made a survey of the area back towards Nanga Brook on the Murray River. My statement continues --

> The bush fire brigade was very effective in this area especially as we only had about 4-5 hours notice in which to prepare to fight the fire.
>
> From my experience in fighting bush fires I consider there should be one control centre in each fire brigade area, and the extensive use of telephones and radios in this connection is very necessary. The control centre could then be kept in touch and be in possession of the facts as they occur, and so be in a position to direct the actual fire fighters to where they are most needed.
>
> Radios are necessary because telephone lines are often put out of action by the fire itself, but I consider that both are essential.
>
> Forestry land in my area was in comparative good order and had generally been burnt within the last two years, the worst portion of this area was along the Murray River.
>
> Firebreaks in the area consist mostly of burnt breaks, as ploughed breaks are very difficult to make in the rough hilly country. I consider that these breaks could be put in more efficiently. In this respect new settlers are not conversant with W.A. forest conditions and are inclined to be afraid of fire and for this reason hesitate to burn breaks when the opportunity appears favourable.
>
> Experienced men from the Forestry Department should be made available to help and advise them in this matter. Backburning in forest country can create a danger unless experienced men with knowledge of the particular area are in charge, assisted by efficient communications and in this respect I think more co-operation between the Forestry Department and the settlers is needed.

BY THE COMMISSIONER: When you say that radios are necessary, why do not the fire brigades obtain radios?---I think it would be very expensive. One radio might not be of much use by itself. With a big fire you would need a number of them in order that each section may be reporting reasonably consistently. We found telephones were very effective in our area. We had no radios. The only reason I mention radios is that I have been to the Forestry at various times and their sets do work very efficiently.

If you did obtain radios by any means at all, would you suggest that they be kept in the district, or would it be adequate if you could get them from Perth on demand?---They do not need to be kept in the district. With

a normal fire, I do not think radios are really required. In our area, it is only when you have a fire of that degree that they are needed.

You say that the Forestry land was in comparatively good order in your area and had generally been burnt within the last two years? The worst portion of this area, you say, was along the Murray River. What was the condition and extent of that piece?---It had been patch-burnt. You must remember that some of that steep hilly country is along the Murray River, and often settlers have trouble in burning that because of the steep hills. With the shady conditions and the deep undergrowth it most likely will not burn in the spring; you have to have favourable conditions to burn it.

Is there much that you would call the worst portion of it?---It is mainly along the river banks in what we call the shady gullies. It was not one continual patch but just bad pockets, really.

It is really a very small portion of the total?---Yes; it is not a very big area.

You say, "Firebreaks in the area consist mostly of burnt breaks, as ploughed breaks are very difficult to make in the rough hilly country. I consider that these breaks could be put in more efficiently." In what way do you think you could obtain improved efficiency?---We have quite a few new settlers in our area, and they are very reluctant, or frightened, to light fires. They have had this fear drummed into them with regard to burning the bush at the right time of the year. It might be too early or too late.

I thought you meant they might not put them in the right positions?---No; they have not burnt enough, really.

You say that experienced men from the Forestry Department should be made available to help and advise them in this matter. Do you think experienced men from the Forests Department could do it better than

the local brigade officers?---I think so. It is a big job on a brigade officer. The Forestry and the settlers should burn in conjunction.

You think there should be more co-operation between the Forestry Department and the settlers. How do you suggest that co-operation might be obtained? What steps might be taken to obtain it?---First of all, in our area I know for a fact that we have only six Forestry men working from the Murray River to Harvey. I do not think that with their present staff they could give a lot of time to this, but they might be able to give a small amount of time. That is the idea. When settlers want to burn their bush, and most have quite a lot of bush which is not well developed, they could burn in conjunction. The settlers would burn their sections and the Forestry Department their sections.

Who is going to initiate this business? Are the settlers going to wait until the Forestry Department come to them and suggest co-operation; or are the settlers going to the Forestry, through the brigades or whatever it might be, and ask the department to co-operate?---I think the settlers should ask. The Forestry do come along and tell them they are burning. When the settlers have a bad section to burn, they should get in touch with the Forestry and have the area organised right through.

Is there anything else you wish to tell us?---The Forestry have a big area to burn, and I do not think they have sufficient staff to burn it, not every year anyway.

(The witness retired).

CHRISTOPHER GUY MURRAY, Farmer,
"Wenlock", North Dandalup,
sworn and examined:

BY THE COMMISSIONER: Are you a landowner in the district?---Yes.

What is the location number of your property?---I think it is A20 or 19.

You have prepared a statement; would you read it?---Yes.

It is as follows:-

On the night of January 20th (Friday) I rang the Forest Department offering to assist fighting a fire which I could see from my property.

This fire appeared to be near Whittaker's old millsite. Other fires were also visible.

I arranged to meet a Forestry vehicle and after picking up Mr. F. Wells Jnr. and Mr. Crockenberg, both of North Dandalup, left to keep appointment at 11 p.m. (approximately).

The Forestry officer we met said, "There are 16 fires raging, most out of control, I advise you to go back and protect your own farms".

At this time, a strong east wind was blowing and, had not the local bush fire brigade "burnt back" along the foot hills, I am confident nothing could have stopped these fires until it reached the coast. This burn back was carried out the following day (Saturday, 21st January). Fortunately, the wind changed to the west, but the forecast was still "East winds" and hot.

<u>Effectiveness of Bush Fire Brigades</u>.

I confine my remarks here to the North Dandalup brigade as I saw no other sections during fire.

Although the telephones in the area were conveniently situated and used to advantage, the communications were far from good.

Mobile radios on the actual fire front could have saved a lot of false alarms and sending overworked men and equipment on fruitless trips, thereby jeopardising other dangerous sections.

I feel that the Army, or S.A.S., could fill the breach as they have the communications (radio) and planes for spotting and manpower.

I am of the opinion that they could be trained in fire fighting and, on a major fire such as this one, and working in co-operation with local brigades, would be the answer to fire fighting.

I am referring to the big fires, not to a normal grass fire. To continue my statement --

Forestry land as fire hazard.

The above land had been allowed to get too dirty, and once alight, and under hot, dry and windy conditions, was impossible to control except by burning back.

Fire breaks round bush holdings.

In my opinion too many farmers have neglected their fire breaks on the grounds that "you can't put a break along those hills - it is so rough", yet when it was decided to burn back along those same hills, breaks were put in remarkably quickly despite the fact that the ground, being dry, was hard as cement; and, on the subsequent burn back which in many cases was just behind the plough, the breaks were effective.

Both the forestry and the farmers had not taken sufficient precautions before the fire. This state of affairs made the job of controlling the fire a difficult one.

BY THE COMMISSIONER: Does your country run back into the scarp or on to the scarp?---Yes; just on to it. The large fire came to the edge of my property.

Your property does not carry any bush at the back?---No. Well, a lot of scrub and bush that is supposed to be cleared or partially cleared. It would be regrowth.

Who was the forestry officer you met on the Friday?---I do not know his name.

Do you know where he was going or where he was coming from?---He followed us from North Dandalup. He went to Mr. Crockenberg, and he rang on Mr. Crockenberg's telephone back to Dwellingup to give his report.

You speak of the Army, or S.A.S. Did you have any experience of them at the fire down here?---Not here; they were at Keysbrook. I saw them there. I understand they did quite a good job there.

So often at a fire you get a lot of willing people who come along but who are not acquainted with local conditions, or with bush fire conditions, and they can become a nuisance?---Well, yes; but they also can be of great help. For instance, there were three school boys. They had never seen a fire before, but they turned out to be as good as any man there. They were very keen; they did all the right things.

You expressed such a high opinion of the Army. I am wondering why you referred to the Army. Surely you could use any ordinary person who came along?---I was thinking of their equipment -- communications and spotting planes; transport, and water carriers.

You did not use any spotting planes, as far as you were concerned, on this occasion?---No. I think there was one flying around in connection with the S.A.S. at Keysbrook.

I was wondering whether you find any advantage from using the Army on account of the discipline they are able to enforce?---Yes, they have discipline which the average civilian would not have.

I have heard it said on several occasions that where you have a gang of men prepared to serve under one man, it is of great help to people controlling fire-fighting operations because they simply have to give that one man his instructions and he sees they are carried out?---Exactly, yes; whereas another civilian might think he

could do more good somewhere else. He would wander off, and his post would be deserted.

You suggest training the Army in fire-fighting. That would certainly be an advantage; but I think the general experience of people who know is that the Army has not the time to give training other than military training?---I think it should be part of the training. Had we been at war when a fire took place, one plane with a cargo of incendiaries could have set the whole of Western Australia alight.

In war time that has been undertaken by civilians under the Civil Defence set-up. That is one reason why I am concerned with the basic requirements for a State Fire Emergency Service, which is one of the terms of reference made to this Commission. That emergency service would be available in any type of disaster in which fire was involved?---Yes; but I feel the Army has this equipment lying idle, whereas we would have to buy it. Who is going to pay for it?

I mention the inadvisability of relying on the Army as they might not be available when you want them?---Yes.

If you are going to fight a fire, I think you will agree with me that you should be able to fight a fire even under the worst circumstances?---Yes, exactly.

I realise that there is a limit to the extent that you can spend money, and you cannot provide expensive equipment all over the country. But if there is a centre from which you could get it at short notice, do you think that would justify the need for a State Fire Emergency service?---Would you agree?---Yes.

I think that is all. Would you like to add anything?---Yes. We realise they require more finance to do their job.

Who?---The Forestry. I think that if they could have a light plane available for spotting, they would find

it very handy in cases such as this. Also, the sign-posting of their roads. The sending of a volunteer into those hills, who does not know the country, is not very good. There was smoke and you could not tell north from south. It could be a dangerous situation. If volunteers could see a signpost, it might lead them back. I know that I would be more happy about it.

THE COMMISSIONER: I would say that is a very good suggestion. Thankyou.

(The Witness retired)

THE COMMISSION ADJOURNED.

C.G. MURRAY,
30/5/61.

Ln/Bly
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